

**WASHINGTON STATE
COMMUNITY COLLEGES
MATHEMATICS
CONFERENCE**

PROGRAM

**APRIL 27 - 29, 1995
WestCoast Wenatchee Center Hotel and Convention Center
Wenatchee, Washington**

**Sponsored jointly by
Skagit Valley College and Whatcom Community College**

Washington State Community Colleges Mathematics Conference 1995

Welcome to Wenatchee and the Twenty-Seventh Annual Washington State Community Colleges Mathematics Conference. This year, the conference is being attended by over 200 people. Sessions include topics related to technology, pedagogy, the NCTM Standards, international educational experiences, mathematical research, and mathematical recreations. Speakers and panel participants include community college, technical college, secondary school, and university faculty from Washington, Oregon, and as far away as Wisconsin. A room has been set aside during coffee breaks in which faculty will be able to share programs by "linking" their graphing calculators. We are all in for a big treat when we hear Doug McKeever's presentation on "Earthquakes and Volcanoes "following Friday night's dinner. After Doug's presentation, a special evening slide show will be offered by Jim Little of Wenatchee Valley College in the Red West Room and everyone is invited to relax at the reception held in our hospitality room.

There is much happening in mathematics and mathematics education today. The intent of this year's conference has been to bring together many of the forces of change, so we may all have a chance to listen, observe, discuss, and participate in the shaping of Washington State mathematics education in the future.

In closing, this conference could not have occurred without the cooperation of Skagit and Whatcom Community College faculty and staff.

Special thanks to:

Skagit Valley College

Marina Frost, Phil Green, Zoe Grimshaw, Richard Huffman, Susan Indorf, Joventina Schaffner, Russell Sherif, Jeff Stady, Chuck Stevens, and Myrna Wilson

Whatcom Community College

Denise Brannan, Diane Chylla, Liz Cunningham, Doug Mooers, Jean Carlson, Connie Rodewald, Bernie Hayward and all of the copy/duplicating staff.

**Washington State Community Colleges
Mathematics Conference 1995**

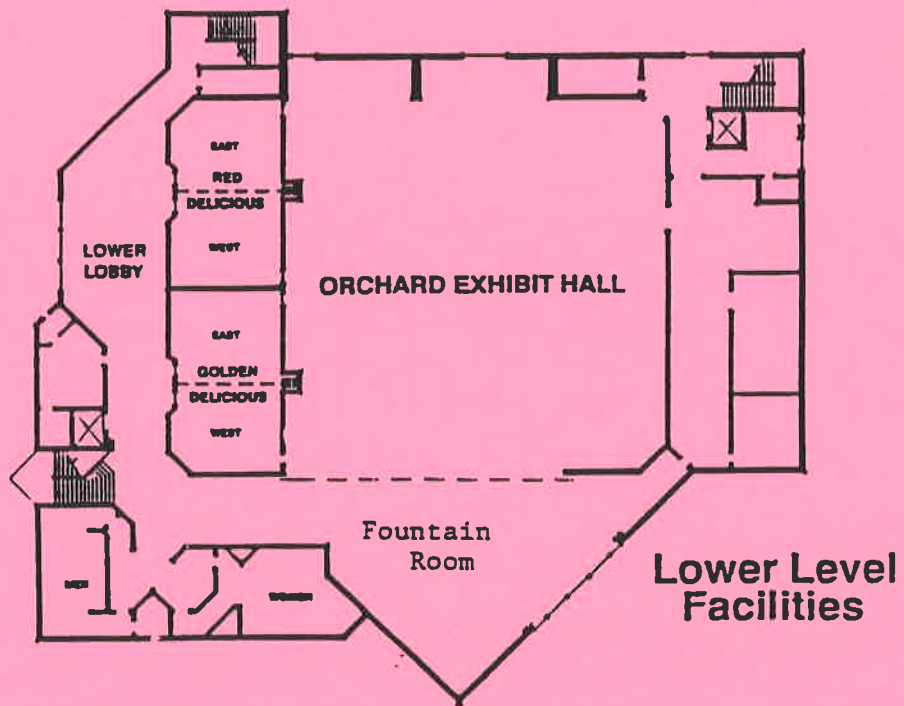
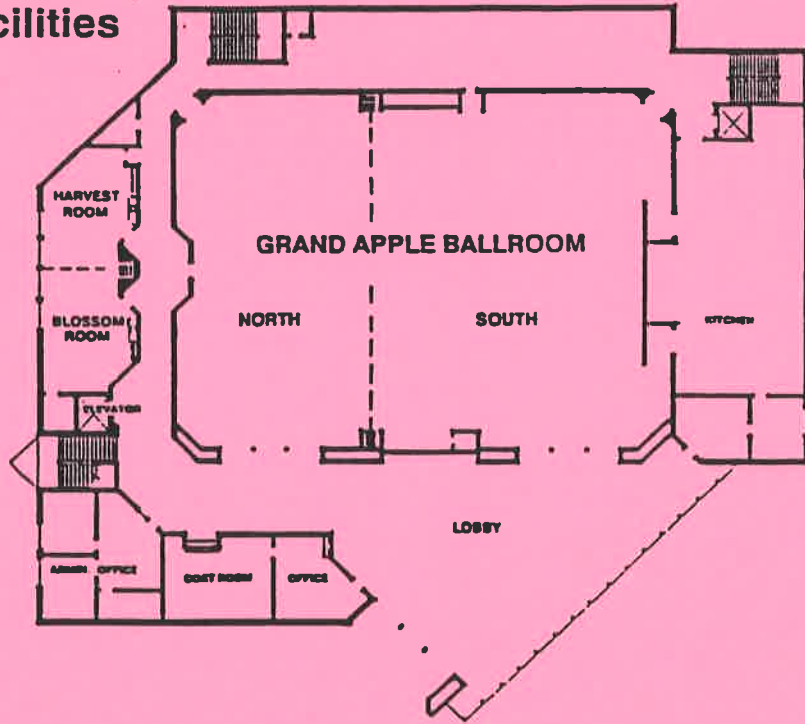
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Meeting Room Layout

WestCoast
Wenatchee Center

Main Level Facilities

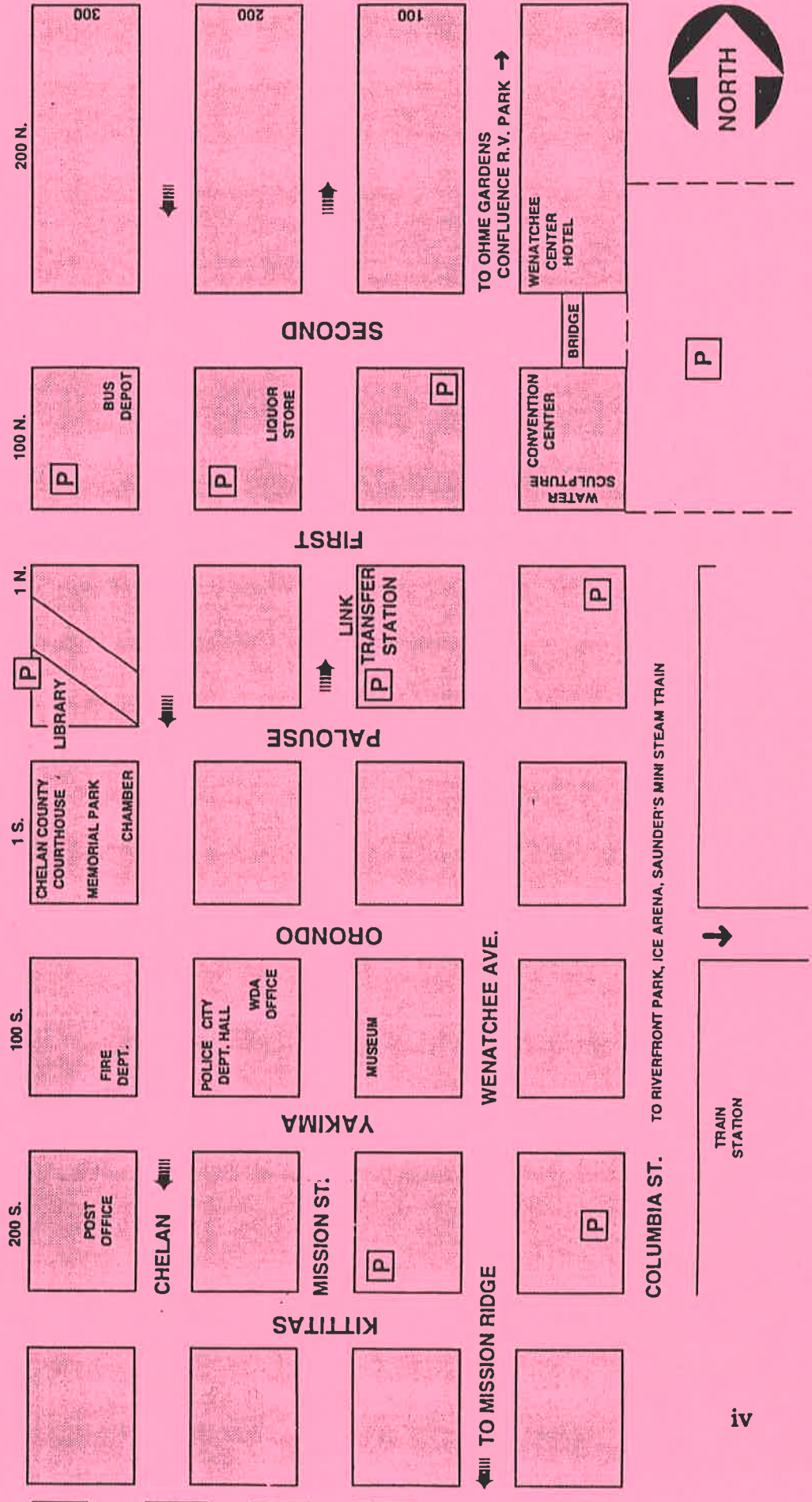


WELCOME Downtown Wenatchee



P = PUBLIC PARKING

"The Natural Choice"



CONFERENCE SESSIONS

**WASHINGTON STATE COMMUNITY COLLEGE MATHEMATICS
CONFERENCE**

THURSDAY April 27

8:00 a.m. - 5:00 p.m.

Workshop on the Geometry of Multivariable Calculus
"Introduction to the Mathematics of Geographical Maps"
Yves Nievergelt. Eastern Washington University. (509) 359-4259
FREE. Fully funded by NSF. (1 credit graduate mathematics available)

4:00 p.m. - 5:00 p.m.

REGISTRATION

Conference Center Foyer

7:30 p.m. - 10:00 p.m.

HOSPITALITY ROOM RECEPTION

Room to be announced

FRIDAY April 28

7:30 a.m. - 8:45 a.m.

BREAKFAST

9:00 a.m. - 10:00 a.m.

NCTM Curriculum Standards: Implementation in Grades 9-12 Algebra, Community College, and University Math Classes. GOLD EAST

Dave Daugharty. Eastern Washington University (509) 359-6074

GOLD WEST

Yet More Spreadsheet Projects

Rosemary Hirschfelder. University of Puget Sound. (206) 756-3569

RED WEST

Math In The Real World:

Our Experiences With Applied Math Programs

Linda Cowen, Whatcom Community College. (360) 676-2170 ext. 308

Alec Buchan. Bellingham High School. (360) 676-6471

Dan Nelson, Skagit Valley College. (360) 428-1261

Paul Parnell, Skagit-Island Tech Prep. (360) 428-1180

Using the HP-48G in Algebra and Precalculus

Diane Butcher-Evans. Green River Community College. (206) 833-9111 ext. 1740

RED EAST

10:00 - 10:15 a.m.

COFFEE BREAK

Informal Sharing of Programs for the TI-82 and TI-85

Bring your link cords and swap programs.

RED WEST

FRIDAY April 28 continued**10:15 - 11:15 a.m.****Education and Mathematics in Russia**

Marina Frost. Skagit Valley College (Oak Harbor). (360) 679-5357

GOLD EAST

Geometry of Multivariable Calculus:**Presentations by NSF Workshop Participants.**

Yves Nievergelt. Eastern Washington University. (509) 359-4259

GOLD WEST

Excel: A Statistical Analysis Package Disguised as a Spreadsheet

Eric Schulz. Walla Walla Community College. (509) 527-4281

RED WEST

Folding Polyhedra

Beth Wood. Western Washington University. (360) 650-3474

RED EAST

11:15 - 11:30 a.m.**COFFEE BREAK**

Bring your link cords and swap programs.

RED WEST

11:30 a.m. - 12:30 p.m.**The Midpoint Rule and Simpson's Rule for Infinite Series**

James Harper. Central Washington University. (509) 963-2402

GOLD EAST

Curve Fitting and Data Analysis**in Precalculus using Graphic Calculators**

Rick Woodmansee. Central Washington University. (509) 925-7641

GOLD WEST

**The Complex Integers of Gauss, Eisenstein,
and Others with Geometric Applications**

Jim Jordan. Washington State University. (509) 335-3144

RED WEST

A New Start For College Mathematics:**Or Mathematics' Greatest Hits**

Harald Ness. COMAP. University of Wisconsin. (414) 929-3658

RED EAST

12:30 - 1:30 p.m.**LUNCH BREAK**

1:00 - 1:25 p.m.**Informal Sharing of Programs for the TI-82 and TI-85**

Bring your link cords and swap programs.

RED WEST

FRIDAY April 28 continued**1:30 - 2:30 p.m.**

Pyramid Mathematics, Sacred Geometry, and Squaring the Circle
Frank Edge. South Puget Sound Community College. (360) 754-7711 ext. 323

GOLD EAST

Learn how to compute π and e on a desert island without a calculator
Todd Lengacher. Western Washington University. (360) 650-4833

GOLD WEST

Using Spreadsheets for Mathematics
Gary Parker. Western Washington University. (360) 650-4833

RED WEST

Math Labs and Math Centers: A Panel Discussion
Denise Brannan. Whatcom Community College. (360) 676-2170 ext. 335

RED EAST

2:30 - 2:45 p.m.**COFFEE BREAK**

Informal Sharing of Programs for the TI-82 and TI-85
Bring your link cords and swap programs.

RED WEST

2:45 - 3:45 p.m.

**Understanding "Understanding", "Applications",
and Other Curriculum Goals.**
Edoh Amiran. Western Washington University. (360) 650-3487

GOLD EAST

Tales from a Siberian Winter.
Mike Greenwood. Clark College. (360) 699-0203

GOLD WEST

The Aerodynamics of a Golf Ball
Jeff Stady. Skagit Valley College (Oak Harbor). (360) 679-5309

RED WEST

Reform Calculus in Washington - A Status Report
Robert Cole. The Evergreen State College. (206) 866-6000 ext. 6714
Jan Ray. Seattle Central Community College. (206) 587-4080

RED EAST

3:45 - 4:00 p.m.**COFFEE BREAK**

RED WEST

4:00 - 5:00 p.m.

WAMATYC MEETING
Mike Greenwood. Clark College. (360) 699-0312

RED WEST

7:00 - 9:00 p.m.**DINNER**

Guest Speaker: Doug McKeever, Whatcom Community College 8:00 - 9:00 p.m.
"EARTHQUAKES and VOLCANOES: A Whole Lot Of Shaking Goin' On"

HOSPITALITY ROOM RECEPTION**9:00 - 11:00 p.m.**
Room to be announced

EXPERIENCES in the PEACE-CORP
Slide Presentation by Jim Little. Wenatchee Valley College. (509) 662-1651

9:30 - 10:30 p.m.
RED WEST

SATURDAY April 29

7:30 - 8:50 a.m.

BREAKFAST

**Guest Speaker: Harald Ness, COMAP. University of Wisconsin
"A New Start For College Mathematics " 8:15 - 8:45 a.m**

9:00 - 10:00 a.m.

**Exploring Periodic Relationships with the TI-CBL
(Texas Instrument's Calculator Based Laboratory)
Lauren Clarke. Western Washington University. (360) 738-3248**

GOLD EAST

**Teaching Abstract Mathematics With ISETL
(Interactive Set Language)
David Jabon. Eastern Washington University. (509) 359-2894**

GOLD WEST

**Explorations with Mathwright
Janet Ray. Seattle Central Community College. (206) 587-4080**

RED WEST

**Interactive Mathematics: How and Why?
Alison Warr. Mt. Hood Community College. (503) 667-7367
Catherine Curtis. Mt. Hood Community College
Penny Slingerland. Mt. Hood Community College**

RED EAST

10:00- 10:15 a.m.

COFFEE BREAK

**Informal Sharing of Programs for the TI-82 and TI-85
Bring your link cords and swap programs.**

RED WEST

10:15 - 11:15 a.m.

**TI-82 For Beginners
Doug Mooers. Whatcom Community College. (360) 676-2170 ext. 285**

GOLD EAST

**Precalculus from the Harvard Calculus Consortium- An Update.
Carl Swenson. Seattle University. (206) 296-5926**

GOLD WEST

**Great Expectations: The Washington State Lottery
Sam Saunders. Washington State University. (509) 335-4122**

RED WEST

**Sediments in Lake Coeur d'Alene, Idaho
Gail Nord. Gonzaga University. (509) 328-4220 ext. 3907
John Nord. St. George's School. (509) 466-1636**

RED EAST

11:15 - 11:30 a.m

COFFEE BREAK

**Informal Sharing of Programs for the TI-82 and TI-85
Bring your link cords and swap programs.**

RED WEST

SATURDAY April 29 continued

11:30 a.m. - 12:30 p.m.

Preparing Future Faculty

Ginger Warfield. University of Washington. (206) 543-7445

GOLD EAST

Max and Min Problems with the "SAME" Answer

James Duemmel. Western Washington Univeristy. (360) 650-4833

GOLD WEST

Intermediate Algebra:

Less Than, Greater Than, or Equal To 100

Steve Kinholt. Green River Community College. (206) 833-9111 ext. 354

Christy Gilliland. Green River Community College. (206) 833-9111 ext. 508

RED WEST

A New Start For College Mathematics: OPEN FORUM

Harald Ness. COMAP, Univeristy of Wisconsin. (414) 921-6297

RED EAST

12:30 - 1:30 p.m.

LUNCH

JOB ANNOUNCEMENTS

CLOSING REMARKS

The pages which follow list speaker abstracts in alphabetical order by TITLE of their presentation.

**WASHINGTON STATE COMMUNITY COLLEGE
MATHEMATICS CONFERENCE 1995**

A New Start For College Mathematics: Or Mathematics' Greatest Hits

Harald Ness

Abstract: COMAP (The Consortium for Mathematics and its Applications) has embarked on an ambitious project, the development of a two semester introductory college mathematics course. This project is being supported by the National Science Foundation, and COMAP has an agreement with Springer-Verlag to publish the text. I will discuss the motivation behind the project and, briefly, the course content.

Time: Friday, April 28 11:30 - 12:30
Saturday, April 29, Breakfast Speaker, 8:25 - 9:00 a.m.
Saturday, April 29, 11:30 a.m.- 12:30 p.m.

Room: RED EAST

The Aerodynamics of a Golf Ball

Jeffery Stady

Abstract: Effect of dimples on the lift of a golf ball. Will briefly go into the history of the dimple, and then focus on the mathematics behind the dimple.

Time: Friday, April 28 2:45 - 3:45 p.m.

Room: RED WEST

The Complex Integers of Gauss, Eisenstein and Others With Geometric Applications

Jim Jordan

Abstract: Several strange qualities of integer systems that are in the complex plane are discussed. Some systems have only one fourth of the integers even while others may have three fourths of the integers even. Some integer systems have long strings of consecutive integers that are primes. The squares of these systems have interesting applications to elementary Euclidean geometry.

Time: Friday, April 28 11:30 a.m.- 12:30 p.m.

Room: RED WEST

Curve-Fitting and Data Analysis in Precalculus

Rick Woodmanssee

Abstract: Making the connection between real-world data and the functions studied in precalculus. Using precalculus concepts and a graphing calculator to analyze data and draw meaningful conclusions.

Time: Friday, April 28 11:30-12:30

Room: GOLD WEST

Education and Mathematics in Russia**Marina Frost**

Abstract: Russia has traditionally had a highly respected mathematics program. Currently, this program is being reformed. The speaker will discuss her experience as a product of the traditional Russian mathematics program as well as discuss and assess some of the more important educational reforms and trends.

Time: Friday, April 28 10:15 - 11:15 a.m.

Room: GOLD EAST

Excel: A Statistical Analysis Package Disguised as a Spreadsheet**Eric Schulz**

Abstract: If you have access to the current release of Excel (Mac or PC version), then you have all that is needed to begin tackling data analysis projects ranging from the simple to the very complex: descriptive data analysis, inferential test computations, programmed computer simulations (modeling) and more. Examples presented will range from the introductory level appropriate for beginners and students to the advanced level for those already comfortable with Excel. Written material will support the interactive, computer-based presentation.

Time: Friday, April 28 10:15 - 11:15 a.m.

Room: RED WEST

Explorations with Mathwright**Janet Ray**

Abstract: Mathwright is an object-oriented computer algebra and graphics system that facilitates the development of mathematical laboratories, simulations and demonstrations. Featured will be a variety of Mathwright "books" written by the presenter and others, ranging in level from algebra to differential equations. An overview of the authoring environment will also be shown. Time will be reserved for an open discussion on the utility of such tools in the college classroom environment.

Time: Saturday, April 29 9:00 - 10:00 a.m.

Room: RED WEST

Exploring Periodic Relationships with the TI-CBL**Lauren Clarke**

Abstract: New technology has made it easier to explore periodic motion in the classroom. We will explore several ways of using the CBL to link the physical aspects of periodic motion to the mathematical concepts that lie beneath.

Time: Saturday, April 29 9:00 - 10:00 a.m.

Room: GOLD EAST

Folding Polyhedra**Beth Wood****Abstract:** Transforming two-dimensional paper into three dimensional polyhedra.**Time:** Friday, April 28 10:15 - 11:15 a.m.**Room:** RED EAST

Geometry of Multivariable Calculus: Presentations by NSF Workshop Participants**Yves Nievergelt****Abstract:** Community college mathematics faculty who have participated in the NSF workshops on "The Geometry of Multivariable Calculus" will present some of the classroom material that they have developed. The level may range from precalculus and business mathematics to linear algebra, multivariable calculus, and perhaps beyond. The topics include splines and the mathematics of geographical maps. Information will be distributed on the workshops for 1995 (computed tomography in medicine) and 1996 (computational geometry in industry).**Time:** Friday, April 28 10:15 - 11:15 a.m.**Room:** GOLD WEST

Great Expectations--The Washington State Lottery**Sam Saunders****Abstract:** There has been a national upsurge in the adoption of state lotteries. These have proved to be a bonanza for the sponsoring states and for the touts who sell advice on methods of developing winning strategies. Some of the surprising statistics from the recent operation of the lotteries will be compared with claims of the experts selling advice. Are there patterns of randomness which repeat at such frequency that winning strategies can be formed? What is a player's true expectation? Does it change as the prize increases? Are all state lotteries the same? These and other questions will be discussed along with their relationship to the classical occupancy problem, the collector's problem, and Russian roulette. The probabilistic details will be kept to a minimum.**Time:** Saturday, April 29 10:15 - 11:15 a.m.**Room:** RED WEST

Interactive Mathematics: How and Why?**Penny Slingerland, Catherine Curtis, Alison Warr**

Abstract: Presenters will discuss curriculum and pedagogical changes adopted by Mt. Hood Community College Mathematics Division. Materials which incorporate these changes were developed with the support of a National Science Foundation Grant. These materials, currently in use at the intermediate algebra level, will be introduced and shared.

Time: Saturday, April 29 9:00 - 10:00 a.m.

Room: RED EAST

Intermediate Algebra: Less Than, Greater Than, or Equal to 100**Steve Kinholt, Christy Gilliland**

Abstract: The Green River Community College Math Department is intending to lower the number of their Intermediate Algebra class to below 100 (currently Math 101). We would like to hear how other schools feel about this or have dealt with this issue, as well as how it affects their AA degree.

Time: Saturday, April 29 11:30 a.m. - 12:30 p.m.

Room: RED WEST

Workshop on the Geometry of Multivariable Calculus

"Introduction to the Mathematics of Geographical Maps" FREE, Fully funded by NSF. (1 credit graduate mathematics available)

Yves Nievergelt

Abstract: At the site and on the eve (Thursday) of the conference, the National Science Foundation (NSF) will sponsor a one-day introduction to the mathematics of geographical maps. Participants will learn about the subject and draft instructional material for use in their calculus courses, for which they may earn one free graduate credit in mathematics. Moreover, for each participant NSF will pay for one day's per diem (\$30) and one night (Wednesday) at the hotel. To register, please contact ASAP (before funds run out) Yves Nievergelt, Department of Mathematics, MS-32, Eastern Washington University, Cheney, WA 99004-2431, (509) 359-4259, or SCAN 353-4259.

Time: Thursday, April 27 8:00 a.m. - 5:00 p.m. (workshop)

Room: Contact Yves Nievergelt

Learn How to Compute π and e on a Desert Island Without a Calculator**Todd Lengacher**

Abstract: In the seventh book of Elements, Euclid describes a division algorithm which when repeated reveals the greatest common divisor of two integers. This result is known today as the Euclidean Algorithm. From this algorithm rises some interesting results including representation of rational and irrational numbers as finite and infinite continued fractions. With these results we will see how to generate the Fibonacci sequence, and find rational approximations to such numbers as π and e .

Time: Friday, April 28 1:30 - 2:30 p.m.

Room: GOLD WEST

Math in the Real World: Our Experiences With Applied Math Programs**Linda Cowan, Alec Buchan, Dan Nelson, Paul Parnell**

Abstract: Schools in Whatcom and Skagit counties, both secondary and postsecondary, have formed partnerships through the efforts of local consortia. Our teachers have begun re-evaluating curriculum models, looking for ways to blend "knowing and doing." This presentation will focus on our experiences with applied math programs. Linda and Paul will provide a brief overview of Tech Prep, Alec will share the architectural design project that his geometry students completed, and Dan will share his experiences in teaching an "Applied Math" course at the college level.

Time: Friday, April 28 9:00 - 10:00 a.m.

Room: RED WEST

Math Labs and Math Centers: A Panel Discussion**Denise Brannan**

Abstract: A panel discussion of the operation of math learning centers in our colleges, their successes and their struggles.

Time: Friday, April 28 1:30 - 2:30 p.m.

Room: RED EAST

Max and Min Problems with the "Same" Answer**James Duemmel**

Abstract: Have you noticed how often max/min problems come in pairs: Maximize the area of a rectangle with fixed perimeter, minimize the perimeter of a rectangle with fixed area? Beware the GAGMI.

Time: Saturday, April 29, 11:30 - 12:30

Room: GOLD WEST

Midpoint Rule and Simpson's Rule for Infinite Series

James Harper

Abstract: The integral test is more than a convergence test, it also provides us with lower and upper bounds for the tails of distinguished convergent series. These lower and upper bounds come from (infinite) lower and upper Riemann Sums. By reversing the roles of integration and summation in the Midpoint Rule and Simpson's Rule one can obtain excellent approximations for the sum of the tails of infinite series.

Time: Friday, April 28 11:30 a.m. - 12:30 p.m.

Room: GOLD EAST

NCTM Curriculum Standards: Implementation in Grades 9-12 Algebra, Community College, and University Math Classes

Dave Daugharty

Abstract: The presentation will deal with the National Council of Teachers of Mathematics Curriculum Standards. Here's how the standards are being implemented in Intermediate Algebra at the 9-12 level, the community college level, and the university level, and how the three levels interface.

Time: Friday, April 28 9:00 - 10:00 a.m.

Room: GOLD EAST

Precalculus from the Harvard Calculus Consortium - An Update

Carl Swenson

Abstract: The Harvard Calculus text has been adopted at many post secondary Washington State institutions. There is currently a writing team creating a precalculus text. The philosophy, contents and schedule will be discussed. However, the majority of the presentation will be used to show exercises that provide the flavor of the text.

Time: Saturday, April 29 10:15 - 11:15 a.m.

Room: GOLD WEST

Preparing Future Faculty**Ginger Warfield**

Abstract: Thanks to the generosity of the Pew Charitable Trust Foundation, the Math Department of the University of Washington has received a two year grant "Preparing Future Faculty" to alter the tunnel-vision, research-career-or-bust climate in which graduate studies have traditionally been carried out. A key ingredient of our effort has been strengthening our bonds with Seattle University and Seattle Central Community College. A number of us who have been involved at various levels will describe our experiences to date and our plans, followed by time for discussion.

Time: Saturday, April 29 11:30 a.m. - 12:30 p.m.

Room: GOLD EAST

Pyramid Mathematics, Sacred Geometry and Squaring the Circle**Frank Edge**

Abstract: They said squaring the circle couldn't be done, but do you have any idea how close we can come? Bring a very sharp pencil if you want to measure any errors in these constructions.

Time: Friday, April 28 1:30 - 2:30 p.m.

Room: GOLD EAST

Reform Calculus in Washington - A Status Report**Robert Cole, Janet Ray**

Abstract: We report on the status of reform calculus efforts in Washington state. We'll summarize what has worked and what hasn't, and offer our observations about the future of calculus reform efforts in the state as well as regionally. In addition, we will discuss the implications for the teaching of calculus of the Mathematical Reasoning Test that the Educations Testing Service will be implementing as part of the Graduate Record Exam starting in 1997. Robert Cole and Janet Ray are co-principal investigators for the Washington Center Calculus Project.

Time: Friday, April 28 2:45 - 3:45 p.m.

Room: RED EAST

Sediments in Lake Coeur d'Alene, Idaho**Gail Nord, John Nord**

Abstract: Areas of interest for young people include the environmental and ecological sciences. We will show examples that can be used in a high school or college mathematics/science classroom to motivate algebra concepts.

Time: Saturday, April 29 10:15 - 11:15 a.m.

Room: RED EAST

Tales from a Siberian Winter**Mike Greenwood**

Abstract: During the academic year 1992-93, the speaker spent his sabbatical teaching in Krasnoyarsk, Russia. Krasnoyarsk is located in central Russia (some would call it Siberia...some would call it cold). Come listen to Dr. Greenwood describe his year coping with the Russian system of higher education.

Time: Friday, April 28 2:45 - 3:45 p.m.

Room: GOLD WEST

Teaching Abstract Mathematics With ISETL (Interactive Set Language)**David Jabon**

Abstract: ISETL, (Interactive Set Language) is a computer language used for teaching abstract mathematical concepts such as sets, relations, and functions. It is being used on an experimental basis in calculus, discrete mathematics, and abstract algebra courses with some impressive results. This talk will describe the language, teaching methods which integrate it into the classroom, and the effects of these methods on learning.

Time: Saturday, April 29 9:00 - 10:00 a.m.

Room: GOLD WEST

TI-82 For Beginners**Doug Mooers**

Abstract: 35 TI-82 Graphing Calculators along with step-by-step instructions will be available for faculty to work in groups solving problems from arithmetic, algebra, precalculus, and calculus. Experiences to include: graphing systems, finding intersection points, graphing a vertical line, working with fractions, displaying radians in exact form, using the TABLE feature, and more. These materials were developed through an Instrumentation and Laboratory Improvement Grant from the National Science Foundation and through matching funds from Whatcom Community College.

Time: Saturday, April 29 10:15 - 11:15 a.m.

Room: GOLD EAST

Understanding "Understanding," "Applications," and Other Curriculum Goals**Edoh Amiran**

Abstract: A workshop in which we will explore different methods for describing courses. We will find out what our group means by phrases such as "topics include quadratic equations" and will discuss means for effective communication.

Time: Friday, April 28 2:45 - 3:45 p.m.

Room: GOLD EAST

Using Spreadsheets for Mathematics

Gary Parker

Abstract: Spreadsheet programs allow students to explore problems at new depths, free them from tedious calculations, and enhance their insight on the development and use of models to solve mathematical problems. This makes spreadsheets an ideal tool for exploring a variety of numerical relationships. Because the problems that can be studied through this medium are of such an assortment, only a few will be examined, such as compound interest problems (amortization).

Time: Friday, April 28 1:30-2:30 p.m.

Room: RED WEST

Using the HP-48G in Algebra and Precalculus

Diane Butcher-Evans

Abstract: The Hewlitt Packard is a wonderful tool for mathematics and is capable of many functions that the TI series of calculators are unable to do. When students learn to use the HP-48G early in their mathematical career, they gain a deeper understanding of order of operations, functions, and other mathematics concepts.

Time: Friday, April 28 9:00 - 10:00 a.m.

Room: RED EAST

WAMATYC Meeting

Mike Greenwood

Abstract: WAMATYC Meeting

Time: Friday, April 28 4:00-5:00 p.m.

Room: RED WEST

Yet More Spreadsheet Projects

Rosemary Hirschfelder

Abstract: Spreadsheets can be used for student projects in a wide variety of subjects, including calculus, discrete math, and algebra. This talk provides suggestions for several types of projects.

Time: Friday, April 28 9:00 a.m. - 10:00 a.m.

Room: GOLD WEST

History of the Washington State Community Colleges Mathematics Conference

The first Washington State Community Colleges Mathematics Conference and Retreat was held in 1969. The organizers were Phil Heft, Jim Relf, Larry Larson, and John Van Duff. We are told that the per person cost at the time was \$16.68 and that 33 people attended the conference. It was held at "The Lodge" at Ashford where accommodations required "sleeping bags". The menu for the first banquet as well as the name of the first "guest speaker" remain unsolved mysteries.

1969	Green River Community College	The Lodge
1970	Spokane Falls Community College	The Lodge
1971	Everett Community College	Snoqualmie Pass
1972	Everett Community College	Snoqualmie Pass
1973	Seattle Central Community College	Snoqualmie Pass
1974	Shoreline Community College	Lake Wilderness
1975	Highline Community College	Providence Heights
1976	Bellevue Community College	Snoqualmie Pass
1977	Shoreline Community College	Providence Heights
1978	Edmonds Community College	Providence Heights
1979	Olympic College	Port Ludlow
1980	Spokane Falls Community College	Sun Mountain
1981	Spokane Falls Community College	Sun Mountain
1982	Highline Community College	Lake Chelan
1983	Olympic College	Port Ludlow
1984	Green River Community College	Alderbrook
1985	Shoreline Community College	Sun Mountain
1986	North Seattle Community College	Alderbrook
1987	Lower Columbia Community College	Alderbrook
1988	Olympic College	Port Ludlow
1989	Bellevue Community College	Lake Chelan
1990	Clark College	Alderbrook
1991	Pierce College and Tacoma Community College	Lake Chelan
1992	Yakima Community College	Yakima
1993	Highline Community College	Wenatchee
1994	South Seattle Community College	Silverdale
1995	Skagit Valley and Whatcom Community Colleges	Wenatchee
1996	Spokane Falls Community College and ORMATYC	Skamania Lodge
1997	Open	
1998	Open	
1999	Open	
2000	Open	

Either at the Friday Dinner, Saturday Breakfast or the Saturday Lunch please announce to all in attendance your college's intention of hosting a future conference. Be sure to state the year (dates and the location if available). Thank you.

Washington State Community Colleges Mathematics Conference
Attendees as of April 20, 1995

Bellevue Community College

Marilyn Anderson
Larry Curnutt
Susan Gronlund
Berthe Habib
Dale Hoffman
Bryan Johns
Jennifer Lavegila
Sasha Malinsky
Marion Miller
Rose Pugh
Peter Ratener
Lynne Sage
Caroline Shook
Larry Svsanka
Deborah Ummel

Big Bend Community College

Donna Brown
Sonia Farag
Brimm Harberts
Antia Hughes
Barbra Jacobs
Stephen Lane
Marte McPherson
Barbra Whitney

Central Washington University

James Harper
Wendy Maybin
Rick Woodmansee

Clark College

Kristine Barker
Aaron Bingham
Paul Casillas
Mark Elliot
Mike Greenwood
Louise Hoover
Adam Jackson
Bill Monroe
Tracy Nehnevaj
Wes Orser
Bruce Ransom
Dennis Watson
Kayoko Yates
Qing Zhang

Eastern Washington University

David Daugharty
Yves Nievergelt

Edmonds Community College

Steven Bogart
Jim Francis
Melissa MacKay
Barbara Maly
Jadwiga Weyant

Edmonds/Highline

Jeremy Gup

Everett Community College

Jean Jainge
Nancy Spears
Heidi Weiss-Green

Evergreen State College

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