**SATURDAY’S OVERVIEW AND SESSIONS AT-A-GLANCE**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Estimation Walk/Run in Lobby</td>
<td></td>
</tr>
<tr>
<td>8:15 – 9:30 a.m.</td>
<td>Registration in Exhibit Area</td>
<td></td>
</tr>
<tr>
<td>9:00 – 10:00 a.m.</td>
<td>First Breakout Session</td>
<td></td>
</tr>
<tr>
<td>10:00 – 10:30 a.m.</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>10:30 – 11:30 a.m.</td>
<td>Second Breakout Session</td>
<td></td>
</tr>
<tr>
<td>11:30 – 11:45 a.m.</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11:45 – 12:45 p.m.</td>
<td>Lunch in the Atrium</td>
<td></td>
</tr>
<tr>
<td>12:45 – 2:15 p.m.</td>
<td>General Session in De Anza 3</td>
<td></td>
</tr>
<tr>
<td>9:00 – 10:00 a.m.</td>
<td>Student Poster Session: 9:30 a.m. to 4:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>2:30 – 3:30 p.m.</td>
<td>Third Breakout Session</td>
<td></td>
</tr>
<tr>
<td>3:30 – 4:00 p.m.</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>4:00 – 5:00 p.m.</td>
<td>Fourth Breakout Session</td>
<td></td>
</tr>
<tr>
<td>5:00 – 6:00 p.m.</td>
<td>Reception in the Exhibit Area</td>
<td></td>
</tr>
</tbody>
</table>

**ROOM** | **9:00-10:00** | **10:30-11:30** | **2:30-3:30** | **4:00-5:00**
---|---|---|---|---
Bonsai I (General Interest) | Serving Students with Disabilities: Strategies for the Classroom | Are We Speaking the Same Language? | Of Elephants, Fuzzy Digs, and Teaching Backwards: A Story About Making Your Course Engaging | The Mystery of Mohammed ibn Musa al-Khwarizmi
Sheri Messersmith College of DuPage | Bob Prior Riverside Community College, NorCo | | | Dean Gooch Santa Rosa Junior College

Bonsai II (Potpourri) | Is 0 = Pi = Infinity? A Tall Tale | What Helps Precalculus Students | Teaching in Developmental Mathematics: A Faculty Collaborative Approach | Examples from Cardano’s Ars Magna
Glenn Pico American River College | Greg Perkins Hartnell College | | | John Thoo Yuba College

Bonsai III (Potpourri) | Statewide Projects to Share with Your Colleagues and Your Students | Thirty “Boredom Busters” | AMATYC Project Access | Adjunct Sessions
Mission College | David Ellenbogen Community College of Vermont | | | Tracey Jackson And Panel

Cottonwood (Basic Skills Mathematics) | Creating a Community of Learners to Improve Student Success | Teaching Developmental Mathematics: It’s Not Just About the Content | Mod, MAP, and ASAP: Course Redesign and Pierce College | Teaching Developmental Algebra to Underprepared Students
George Woodbury College of Sequoias | Lynn Marecek & MaryAnn Anthony Santa Ana College | | | Ravin Pan CSU Sacramento

Redwood I (Calculus and Above) | That About Sums It Up and Then Sum | What’s So “Valuable” About Calculus, Anyway? (Why Finance ends in an “e”) | Geodesics on Regular Polyhedra | Nuts and Bolts of Teaching Integral Calculus
Joel Siegel Sierra College | Nicholas Gunther Investment Banking | | | Vladimir Logvinenko & Iaroslav Kryliouk

Redwood II (Technology) | College Algebra in the Age of Wolfram Alpha | I Know It’s Out There Somewhere: Free Online Math Resources | Mathematical Software: Computational Crutch or Springboard to Greater Understanding | No Session
Sheldon Axler San Francisco State University | Larry Green Lake Tahoe Community College | | Wade Ellis West Valley College

Ironwood (Statistics) | Teaching Students to Understand the Role of Data Collection in Statistical Inference | The Sequencing of Topics in Introductory Statistics | Statistics Using SPSS | No Session
Robert Gould UCLA | Kenneth Brown College of San Mateo | | Steven Davis & Evelyn Davis CSU Los Angeles and Orange Co, Probation

---
The Portola Hotel and Spa

Saturday Reception in the Exhibit Area  5:00 P.M. - 6:00 P.M.

Please join the CMC\textsuperscript{3} Board and your colleagues for door prizes and post conference gathering.

38\textsuperscript{th} Annual Fall Conference
Welcome to the 38th Annual Fall Conference! If this is your first CMC3 conference, we send you an even bigger welcome. Your board has been hard at work planning a fabulous program. We have some returning speakers, as well as new ones. If you are interested in getting involved with CMC3, please speak to one of the board members or fill out the bottom part of the evaluation. Have a great time and consider speaking or presiding next year.

Board and Conference Committee

President: Barbara Illowsky  
Past-President: Larry Green  
President-Elect & Monterey  
Conference Chair: Susanna Crawford  
Secretary: Greg Daubenmire  
Treasurer: Rebecca Fouquett  
Mont. Speaker Chair: Wade Ellis  
Conference AV Specialist & Tahoe  
Conference Chair: Michael Eurgubian  
Campus Reps Coord: Tracy Jackson  
Membership Chair: Joe Conrad  
Hotel Liaison: Rob Knight  
Business Liaison: Mark Harbison  
MAA Liaison: Wade Ellis  
Newsletter Editor: Jay Lehmann  
Adjunct Advocate: Tracey Jackson  
CMC Liaison: Jenny Freidenreich  
Awards Coord: Ekaterina Fuchs  
AMATYC Liaison: Marcella Ladd  
Articulation Breakfast: Steve Blasberg  
Web Page Coordinator: Larry Green  
Foundation President: Cynthia Speed

Special Thanks to:

Portola Plaza Hotel & Spa  
Gold Sponsors ($1000 - $1999):  
Solano Community College  
Silver Sponsors ($500 - $999):  
Los Rios Community College District  
In-kind Donations:  
American Mathematical Association of Two-Year Colleges  
– bags  
Mathematics Faculty Members from Solano College  
– envelope stuffing  
Solano College  
– printing  
Evergreen Valley College  
– printing  
Pearson Higher Education  
– Friday evening “after party”  

Vendors:  
Cengage Learning  
Casio America, Inc.  
Hawkes Learning Systems  
iLearn-Class of 1  
McGraw-Hill Higher Education  
MDTP  
Pearson Higher Education  
Texas Instruments  
Thinkwell  
XYZ Textbooks/MathTV  
WebAssign  
W.H. Freeman + Company  
Wiley  

All of our Door Prize and Foundation Donors

PLEASE VISIT THE CMC3 WEB SITE: http://www.cmc3.org
The CMC³ Foundation wishes to acknowledge the following people who have so generously donated to the Scholarship Fund during the fiscal year July 1st, 2009 to June 30th, 2010.

**Circle of Friends ($500 or more)**
- CMC³
- Debra Landre

**Hexagon of Friends ($200-$499)**
- Charles Barker
- Robert Bradshaw
- Wade and Jane Ellis
- Alice Kaseberg
- Marcella Laddoe
- Allyn Washington

**Pentagon of Friends ($100-$199)**
- Steve Blasberg
- Guy De Primo
- Richard Hansen
- Gary Ling
- Anita Maxwell
- Janet Tarjan
- Ray Wuco

**Square of Friends ($50-$99)**
- Edward Braunhut
- Susanna Crawford
- Noelle Eckley
- Michael Eurgubian
- Cynthia Speed
- Frederick Teti

**Triangle of Friends ($5-$49)**
- Joe Conrad
- Tina Levy
- Cynthia Stubblebine
- Randy Taylor
**CMC³ PRESIDENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>President</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 – 1974</td>
<td>James Curl</td>
<td>Modesto Junior College</td>
</tr>
<tr>
<td>1974 – 1977</td>
<td>Raymond Wuco</td>
<td>San Joaquin Delta College</td>
</tr>
<tr>
<td>1978 – 1980</td>
<td>Brandon Wheeler</td>
<td>Sacramento City College</td>
</tr>
<tr>
<td>1980 – 1981</td>
<td>Hal Andersen</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>1982 – 1983</td>
<td>Art Dull</td>
<td>Diablo Valley College</td>
</tr>
<tr>
<td>1984 – 1985</td>
<td>Pat Boyle</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>1986 – 1987</td>
<td>Shirley Trembley</td>
<td>Bakersfield College</td>
</tr>
<tr>
<td>1988 – 1989</td>
<td>Wade Ellis, Jr.</td>
<td>West Valley College</td>
</tr>
<tr>
<td>1990 – 1991</td>
<td>Denny Burzynski</td>
<td>West Valley College</td>
</tr>
<tr>
<td>1992 – 1993</td>
<td>Barry Wood</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>1994 – 1995</td>
<td>Debra Landre</td>
<td>San Joaquin Delta College</td>
</tr>
<tr>
<td>1996 – 1997</td>
<td>Chris Burditt</td>
<td>Napa Valley College</td>
</tr>
<tr>
<td>1998 – 1999</td>
<td>Michael Eurgubian</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>2000 – 2001</td>
<td>Lois Yamakoshi</td>
<td>Los Medanos College</td>
</tr>
<tr>
<td>2002 – 2003</td>
<td>Randy Taylor</td>
<td>Las Positas College</td>
</tr>
<tr>
<td>2004 – 2005</td>
<td>Rick Hough</td>
<td>Skyline College</td>
</tr>
<tr>
<td>2006 – 2007</td>
<td>Rob Knight</td>
<td>Evergreen Valley College</td>
</tr>
<tr>
<td>2008 – 2009</td>
<td>Larry Green</td>
<td>Lake Tahoe College</td>
</tr>
<tr>
<td>2009 – Present</td>
<td>Barbara Illowsky</td>
<td>De Anza College</td>
</tr>
</tbody>
</table>

**CMC³ DISTINGUISHED SERVICE AWARD RECIPIENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Recipient</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Ray Wuco</td>
<td>San Joaquin Delta College</td>
</tr>
<tr>
<td>1993</td>
<td>Frank Denney</td>
<td>Chabot College</td>
</tr>
<tr>
<td></td>
<td>Wade Ellis Jr.</td>
<td>West Valley College</td>
</tr>
<tr>
<td></td>
<td>Brandon Wheeler</td>
<td>Sacramento City College</td>
</tr>
<tr>
<td>1994</td>
<td>Patrick Boyle</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td></td>
<td>Arthur Dull</td>
<td>Diablo Valley College</td>
</tr>
<tr>
<td>1995</td>
<td>Hal Andersen</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td></td>
<td>Sister Clarice Sparkman</td>
<td>San Jose City College</td>
</tr>
<tr>
<td>1996</td>
<td>James Curl</td>
<td>Modesto Junior College</td>
</tr>
<tr>
<td>1997</td>
<td>Guy De Primo</td>
<td>City College of San Francisco</td>
</tr>
<tr>
<td>1998</td>
<td>Allen Utterback</td>
<td>Cabrillo College</td>
</tr>
<tr>
<td>1999</td>
<td>Barry Wood</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>2000</td>
<td>Denny Burzynski</td>
<td>West Valley College</td>
</tr>
<tr>
<td>2001</td>
<td>Chris Burditt</td>
<td>Napa Valley College</td>
</tr>
<tr>
<td>2002</td>
<td>Wei Jen Harrison</td>
<td>American River College</td>
</tr>
<tr>
<td>2003</td>
<td>Marilyn McBride</td>
<td>Skyline College</td>
</tr>
<tr>
<td>2004</td>
<td>Michael Eurgubian</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>2005</td>
<td>Lois Yamakoshi</td>
<td>Los Medanos College</td>
</tr>
<tr>
<td>2006</td>
<td>Debra Landre</td>
<td>San Joaquin Delta College</td>
</tr>
<tr>
<td>2007</td>
<td>Dave Johnson</td>
<td>Diablo Valley College</td>
</tr>
<tr>
<td>2008</td>
<td>Chris Barker</td>
<td>De Anza College</td>
</tr>
<tr>
<td>2009</td>
<td>Rick Hough</td>
<td>Skyline College</td>
</tr>
</tbody>
</table>

**CMC³ PRESIDENT'S AWARD RECIPIENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Recipient</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Barry Wood</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>2003</td>
<td>Chris Barker</td>
<td>De Anza College</td>
</tr>
<tr>
<td>2004</td>
<td>Noelle Eckley</td>
<td>Lassen College</td>
</tr>
<tr>
<td>2005</td>
<td>Barbara Illowsky</td>
<td>De Anza College</td>
</tr>
<tr>
<td></td>
<td>Zwi Reznik</td>
<td>Fresno City College</td>
</tr>
<tr>
<td>2006</td>
<td>Sandi Nieto</td>
<td>Santa Rosa Junior College</td>
</tr>
<tr>
<td>2007</td>
<td>Randy Taylor</td>
<td>Las Positas College</td>
</tr>
<tr>
<td>2008</td>
<td>Mark Harbison</td>
<td>Sacramento City College</td>
</tr>
<tr>
<td>2009</td>
<td>Jim Spencer</td>
<td>Santa Rosa Junior College</td>
</tr>
</tbody>
</table>
CONFERENCE PROGRAM - FRIDAY

Registration: 2:30 - 6:30 p.m. Portola Hotel & Spa Lobby
Math Trivia Session: 3:00 - 6:30 p.m. Portola Room
   Sponsored by McGraw-Hill Higher Education.
Reception: 7:00 - 9:00 p.m. De Anza III Room
   Coffee and Tea will be enjoyed at the reception. Those not attending the reception are welcome to attend the talk at ~ 8:00 p.m.

KEYNOTE SPEAKER

John Martin
Santa Rosa Junior College

A Piece of Pi

Presider: Barbara Illowsky, CMC 3 President
De Anza College

Through the ages, the ratio of the circumference of a circle to its diameter, which we call \( \pi \), has fascinated mathematicians and non-mathematicians alike. In this presentation we will explore the history, the mysteries, and the controversies surrounding this famous number. You'll also have the opportunity to win some fabulous prizes!

2nd Annual Pearson Education Game Night:

9:00 p.m. - 12:00 a.m. Bonsai Room
   Sponsored by Pearson Higher Education. Drinks and Appetizers will be served.
FIRST SESSION: 9:00 A.M. – 10:00 A.M.

**Bonsai I**

“Serving Students with Disabilities: Strategies for the Classroom”

Speaker: Sherri Messersmith  
College of DuPage  
sherri.messersmith@gmail.com

What are our obligations, and how can we help disabled students learn mathematics? I will discuss equal-access laws, types of disabilities, and strategies for helping students with disabilities learn mathematics in the classroom and online. Participants will leave with ideas and handouts for immediate use in their own classrooms.

Presider: Greg Daubenmire  
Las Positas College

---

**Bonsai II**

*Is 0 = Pi = Infinity? A Tall Tale*

Speaker: Glenn Pico  
American River College  
PicoG@arc.losrios.edu

We will look at several paradoxes starting with Gabriel's Horn and eventually come to an unsettling result that zero is equal to Pi which is also equal to infinity and bagels that disappear into the depths of three space. In an effort to figure it all out, we will explore sequences of functions, different types of convergence and conditions for which we can pull a limit inside an integral. Hopefully in the end the audience will see that certain results from calculus that had seemed intuitively obvious are really a leap of faith.

Presider: Sue Broxholm  
Skyline College

---

**Bonsai III**

“Statewide Projects to Share with Your Colleagues and Your Students”

Speaker: Ian Walton  
Mission College  
Ian@asccc.org

Come and learn about several statewide projects that might affect the preparation level of your students. The Academic Senates of UC, CSU and CCC (ICAS) have just jointly released a new Mathematics Competencies document that deserves to be shared widely with students and colleagues. And our system is creating a statewide mathematics assessment mechanism. Let's discuss implementing this at your college and how to tie it with placement and skill remediation. Also hear about two statewide Research Group projects (BRIC and Basic Skills).

Presider: Tracey Jackson  
________________________________

**Cottonwood**

“Creating a Community of Learners to Improve Student Success”

Speaker: George Woodbury  
College of Sequoias  
georgew@cos.edu

You can increase your students' chances for success by creating a community in your class. The speaker will share his experiences and techniques for increasing the sense of community, both inside and outside the classroom. These techniques can be applied at the developmental and transfer level.

Presider: Janhavi Joshi  
De Anza College
Redwood I

“That About Sums It Up and Then Sum”

Speaker: Joel Siegel
Sierra College
joelsiegel@ymail.com

Starting with Euler’s method for summing integers we explore a number of different techniques become surprisingly interesting versatile and even exotic. We conclude with some conjectures on sums.

Presider: John Thoo
Yuba College
jthoo@yccd.edu

Ironwood

“Eat Less Salt, Drink More Wine, Dump the Cell Phone, Eat More Salt, and Live Longer: Teaching Students to Understand the Role of Data Collection in Statistical Inference”

Speaker: Robert Gould
UCLA
rgould@stat.ucla.edu

Data collection, the design (or lack of design) of experiments, is often overlooked in introductory statistics because it is foreign to our mathematical training. Yet data collection can provide a topical and interesting approach to teaching and motivating the difficult concept of statistical inference. We’ll examine the role that data of all kinds can play to help students understand inference.

Presider: Charles (Chuck) Barnett
Las Positas College

Redwood II

“College Algebra in the Age of Wolfram Alpha”

Speaker: Sheldon Axler
San Francisco State University
axler@sfsu.edu

How should the new easy-availability of symbolic processing programs influence what we teach in college algebra? How will symbolic processing programs that can show the steps used in a computation change the way instructors assign and grade homework? This talk will discuss and illustrate possible answers to these questions.

Presider: Rebecca Fouquette
Santa Rosa Junior College
Speaking the language of mathematics begins with understanding its vocabulary, yet not all dictionaries are created equal. Explore the definitions of common mathematical terms and help answer the question, "Is it too late to create new mathematical terms?"

Presider: Bic Ha Dovan
Santa Rosa Junior College

"What Helps Precalculus Students Succeed?"

Speaker: Greg Perkins
Hartnell College
gsperk@sbcglobal.net

After being frustrated by high attrition rates in Precalculus for many years, I began to use alternate teaching methods such as Video Podcasts, ALEKS and Math Academy successfully. I have tracked the results and will share the materials and some thoughts about what works and why.

Presider: Wade Ellis
West Valley College

"Thirty Boredom Busters"

Speaker: David Ellenbogen
Community College of Vermont
pianomath@gmail.com

The typical course has 15 to 45 class meetings. By using a combination of personal anecdotes, humor, real-world applications, and brief classroom activities, each class can include something memorable. This talk includes 30 examples that have been successfully used to break the monotony that can inhabit the math classroom.

Presider: Ray Wuco
San Joaquin Delta College

"Teaching Developmental Mathematics: It’s Not Just About the Content!"

Speakers: Lynn Marecek & Mary Anne Anthony
Santa Ana College
marecek_lynn@sac.edu

Do you find teaching developmental math at times difficult and overwhelming? Do your students have so many weaknesses that it is hard to teach the math? Learn about a class model whose proactive approach can provide students with the support and strategies they need for success.

Presider: Andrew Phelps
De Anza College
“The Sequencing of Topics in Introductory Statistics”

Speaker: Kenneth Brown
College of San Mateo
brownkm@smccd.edu

In 2001, Beth Chance and Allan Rossman published a paper called “Sequencing Topics in Introductory Statistics: A Debate on What to Teach When” (The American Statistician, 55: 140 - 144, 2001). As it has been nearly ten years since the paper was published, it is worthwhile revisiting the arguments in light of what we, as practicing teachers using a variety of materials, are actually doing, and discussing them amongst ourselves. In particular, we want to consider ways to vary the sequence given that a teacher is using a particular text or teaching materials. It is also worthwhile considering (and discussing) additional aspects of the sequencing of topics that were not discussed by Chance and Rossman, such as the treatment of probability. The discussion will also consider proposals subsequent to the Chance and Rossman paper (e.g. Malone et al, “Resequencing Topics in an Introductory Applied Statistics Course” (The American Statistician, 64: 52-58, 2010).
“What’s So Valuable About Calculus, Anyway? (Why Finance Ends in an e.)”

Speaker: Nicholas Gunther
Investment Banking
nlgunther@gmail.com

Math students often wonder about the practical value of mathematics to them in their future lives, and sometimes doubt its relevance in fields outside of hard science and engineering. In fact, the importance of mathematics to diverse fields has grown substantially in recent years. One notable example is modern finance. By way of illustration, financial valuation is now consistently expressed through exponentiation to the base e, representing continuous compounding. The importance of exponentiation, and the natural logarithmic base, extends much deeper. The currently preferred model of financial asset dynamics is based on “exponential martingales.” This model explains, for example, why investors are unlikely to “beat the market”.

Presider: Debra Van Sickle
Sacramento City College

“I Know It’s Out There Somewhere: A Tour of Free Online Math Resources”

Speaker: Larry Green
Lake Tahoe Community College
GreenL@ltcc.edu

The speaker will give a virtual tour of many of the outstanding free tools for mathematics that are available online: videos, tutorials, animations, games, and math creation applets will be explored. Included will be a discussion by the presenter and attendees of how to most effectively incorporate these tools in classes from Pre-algebra to Differential Equations.

Presider: Wade Ellis
West Valley College

Please visit our website at www.cmc3.org to find:
- Updated Conference Info
- CMC³ Newsletters
- Speaker Proposal Forms
- Presider Proposal Forms
- Other CMC³ Information
ITALIAN LUNCHEON BUFFET IN THE ATRIUM

Four salads including tossed Caesar, tomato mozzarella and basil salad, antipasti salad, and marinated artichokes, vegetarian lasagna, chicken parmesan, fresh vegetables, garlic bread, cannoli, tiramisu, cheesecake, coffee, decaffeinated coffee, tea, iced tea, and lemonade.

GENERAL SESSION & KEYNOTE 12:45 P.M. – 2:15 P.M.

General Session: 12:45 p.m. – 1:15 p.m. Announcements and CMC3 Awards
De Anza III Barbara Illowsky, CMC3 President

Keynote Presentation: 1:15 p.m. – 2:15 p.m.

KEYNOTE SPEAKER

William Dunham
Muhlenberg College

Two Morsels from Euler

Over his illustrious career, Leonhard Euler (1707 – 1783) proved the Euler Identity, established the Euler Polyhedral Formula, and solved the Basel Problem – results that can be seen as the “main courses” of his mathematical banquet. But he also cooked up some “side dishes” – i.e., discoveries of lesser significance which nonetheless illustrate his brilliance as well as anything.

In this talk, we consider a pair of these morsels. One is from the realm of simple algebra, where Euler managed to factor a seemingly irreducible 4th-degree polynomial that had stumped Nicholas Bernoulli. The other is from the realm of number theory, where Euler sought four different whole numbers, the sum of any pair of which is a perfect square. The numbers he found - namely 18530, 38114, 45986, and 65570 - suggest how keen his mathematical ability was. By following Euler’s reasoning in these two examples, I hope to demonstrate that seeing genius in action is the best way to appreciate it.
The California Mathematics Council Community Colleges Foundation is annually providing several dozen scholarships to honor our mathematics and science students and we need your financial help. We rely on your generosity and donations to fund the Scholarship Program. Please consider making a donation to our CMC3 Foundation Scholarship Fund. Contributions are tax deductible as provided by law and our tax ID Number is 94-3227552.

Kindly mail your donation to
Professor Rebecca Fouquette
Mathematics Department
Santa Rosa Junior College
1501 Mendocino Avenue
Santa Rosa, California 95401.
Count on the best authors in the country, including many from California. Visit our display booth to check out our latest offerings.

Robert Gould  
*University of California–Los Angeles*  
Statistics

Jay Lehmann  
*College of San Mateo*  
Developmental Math

Lynn Marecek  
*Santa Ana College*  
Developmental Math

Bob Prior  
*Riverside Community College*  
Developmental Math

MaryAnne Smith  
*Santa Ana College*  
Developmental Math

George Woodbury  
*College of the Sequoias*  
Developmental Math

www.pearsonhighered.com/math
THIRD SESSION: 2:30 P.M. – 3:30 P.M.

**Bonsai I**

**“Of Elephants, Fuzzy Dogs, and Teaching Backwards: A Story About Making Your Course Engaging”**

Speaker: David Sobecki  
Miami University, Hamilton  
dsobecki@cinci.rr.com

Traditionally, we have saved applications until students have practiced the math needed to solve problems. This may be mathematically sound, but it’s not engaging for the student, and gives them the impression that most of math is abstract. I propose a backward approach: using relevant applications to introduce and motivate the math.

**Bonsai II**

**“Teaching in Developmental Mathematics: A Faculty Collaborative Approach”**

Speaker: Terrie Teegarden  
San Diego Mesa College  
tteegard@sdccd.edu

Faculty collaboratives across the state have been collecting a variety of activities, resources, teaching tools and more. Learn what is available to you and how you can get involved with sharing and adapting promising practices with your colleagues. Participants will be asked to give suggestions for other promising resources to be included in the database.

Presider: Jay Lehman  
College of San Mateo

**Bonsai III**

**“AMATYC Project ACCCESS”**

Speaker: Corrine Kirkbride  
Solano College  
corrine.kirkbride@solano.edu

AMATYC Project ACCCESS is a mentoring and professional development initiative for two-year college mathematics faculty sponsored by the American Mathematical Association of Two-Year Colleges (AMATYC). The goal of the project is to facilitate current and continued professional growth for a cadre of two-year college mathematics faculty. The development, implementation, and evaluation of a project will be a component of each Fellow’s professional development experience. The speaker will discuss her experiences with Project ACCCESS.
Redwood I

"Geodesics on Regular Polyhedra"

Speaker: Dmitry Fuchs  
UCD  
fuchs@math.ucdavis.edu

The word geodesics come from differential geometry: this is a curve on a given surface which provides the shortest path between its sufficiently close points. We will consider a seemingly simplest case: geodesics on a polyhedral surface. A point and an initial direction determine a whole geodesic (well, we need to assume that we never arrive at a vertex). Is it possible that a geodesic is closed, that is, after some time, starts repeating itself? Surprisingly, almost nothing is known about that. But there is one case, when we know a lot: the case when the polyhedron is regular (a tetrahedron, a cube, an octahedron, an icosahedron, or a dodechedron). I will address this exciting geometric subject, and even if you do not like it, you will admire the beautiful pictures I am going to demonstrate.

Presider: Ekaterina Fuchs  
San Francisco City College

Ironwood

"Statistics Using SPSS"

Speaker: Steven Davis, CSU Los Angeles  
Evelyn Davis, Orange County Probation  
sdcomet900@att.net

SPSS is statistical software used in the business world to calculate statistics. Thus it is very beneficial for students to learn statistics with the SPSS software. We will demonstrate the power of statistics with SPSS and let participants interact on the use of the software.

Redwood II

"Mathematical Software: Computational Crutch or a Springboard to Greater Understanding?"

Speaker: Wade Ellis  
West Valley College  
wellis@ti.com

Many instructors consider computer packages like Mathematica, Maple and TI-Nspire as a useful (though sometimes harmful) computational assistant. More recently these packages have become much more flexible and capable. Mathematics instructors have begun to use them to develop documents that provide students with the opportunity to purposely act on mathematical objects and transparently observe the consequences of their actions. Such experiences lead to lively classroom discussions that can produce greater student understanding. Several examples of such action-consequence documents and their associated inquiry questions will be presented and discussed.

CSU/UC Mathematics Diagnostic Testing Project

MDTP tests measure readiness for mathematics courses and are approved for use by California Community Colleges until 2012:

- The Algebra Readiness Test assesses preparation for first year algebra courses.
- The Elementary Algebra Diagnostic Test assesses preparation for second year algebra courses.
- The Intermediate Algebra Diagnostic Test assesses preparation for precalculus and other courses at that level.
- The Precalculus Diagnostic Test assesses preparation for calculus. This test is available in a 40-item version and a 60-item version.

MDTP has two on-line practice tests available to anyone with Internet access. Students can use the on-line tests to help prepare for precalculus and calculus level courses.

http://mdtp.ucsd.edu/OnlineTests.shtml

For more information, contact
MDTP’s California Community College Coordinator MarieAnne Anthony at (714) 564-6646 or e-mail to cccmdtp@attglobal.net  
http://mdtp.ucsd.edu
“Mod, MAP, and ASAP: Course Redesign at Pierce College”

Speaker: Katherine Yoshiwara
LA Pierce College
kyoshiwara@hotmail.com

Following the guidelines of the California Basic Skills Initiative, Pierce is offering three new developmental courses: a module-based elementary algebra, an activity-based intermediate algebra, and a one-semester combined elementary/intermediate. The presenter will give a progress report, highlighting successes and remaining challenges. Audience discussion and feedback will be solicited.
Bonsai I

“The Mystery of Mohammed ibn Musa al-Khwarizm”

Speaker: Dean Gooch
Santa Rosa Junior College
dgooch@santarosa.edu

This talk is about the man who is credited with writing the first algebra book, Mohammed ibn Musa al-Khwarizmi. The questions that I wish to address and partially answers are: Who was Mohammed ibn Musa? What were his influences? Where did he come from?

Bonsai II

“Examples from Cardano’s Ars Magna”

Speaker: John Thoo
Yuba College
jthoo@ycdd.edu

The solutions of the cubic equation and of the quartic equation were milestones in the history of algebra, and were certainly pinnacle achievements in mathematics during the Renaissance. I will present a whirlwind tour of the history of algebra: problems leading to algebra; equations and algorithms; the theory of equations; and modern algebra. A good portion of the talk will be spent presenting examples of solving the cubic equation, from Cardano’s "Ars magna", and showing how the solution of the cubic, and not the quadratic, led to a serious study of complex numbers for the first time.

Bonsai III

“Adjunct Session”

Speakers: Tracey Jackson & Panel
tkkjackson@yahoo.com

A panel discussion on the tenure-track hiring process, which may be of interest to those seeking full-time positions.
“Teaching Developmental Algebra to Underprepared Students”

Speaker: Ravin Pan  
CSU Sacramento  
panr@saclink.csus.edu

The presenter will demonstrate an algebraic approach that he has been using as a former Detroit Public teacher and now as a professor for the Learning Skills Center at CSU-Sacramento. The presenter will show mathematical tasks, transcripts, and students’ works from Detroit and students’ works from CSU-Sacramento.

Redwood I

“Nuts and Bolts of Teaching Integral Calculus”

Speakers: Vladimir Logvinenko, De Anza College  
Iaraslav Kyrliouk, De Anza College  
logvinenkovladimir@deanza.edu  
kyrioukiukiaraslav@deanza.edu

In the more or less Socratic mode we show how to enhance the delivery of some traditional topics of Integral Calculus. We also present several little known connections between Integral Calculus and other branches of Mathematics and some new applications.

Presider: Joseph Conrad  
Solano College

New This Year at CMC³ in Monterey:  
Student Poster Session

Please take a look at the student posters in the Exhibit Area throughout the conference.

Students will be available to answer questions about their posters from 12:30 pm – 12:45 pm.

Also please remember there will be a  
Reception and Prizes

5:00 pm – 6:00 pm.  
In the Exhibit Hall Area

Please enjoy food, drawings, and our annual Foundation prizes!
The CMC³ Foundation is annually providing several dozen scholarships to honor our mathematics and science students and we need your financial help. We rely on your generosity and donations to fund the Scholarship Program. Please consider making a donation to our CMC³ Foundation Scholarship Fund. Contributions are tax deductible as provided by law and our tax ID Number is 94-3227552.

Kindly mail your donation to The CMC³ Foundation Scholarship Program, C/O Professor Jim Spencer, Mathematics Department, Santa Rosa Junior College, 1501 Mendocino Avenue, Santa Rosa, California 95401.
MARK YOUR CALENDARS!

CMC³ 15th Annual Recreational Mathematics Conference

April 29 – April 30, 2010

MontBleu Hotel and Casino
Stateline, Nevada
Overlooking Beautiful Lake Tahoe

For information contact:

Michael Eurgubian, Conference Chair
Santa Rosa Junior College
meurgubian@santarosa.edu  (707) 527-4747

The California Mathematics Council, Community Colleges
www.cmc3.org