MichMATYC 2016

At

Delta College

October 14th and October 15th

http://websites.delta.edu/math/michmatyc2016/

Saturday, October 15, 2016

Welcome
Commons (lower level)
8:45 - 8:50

Dr. Jean Goodnow
President, Delta College

Introduction of Keynote
Commons (lower level)
8:50 - 8:55

Jim Ham
President-Elect, AMATYC

Keynote

Commons (lower level)
9:00 - 9:50

"The Winds of Change"
Dr. Linda Braddy

Vice President for Academic Affairs
Tarrant County College Northeast Campus, Hurst, TX

Presentations
10:00 - 11:50
1:30 - 3:20

Lunch
Commons (lower level)
12:00 - 12:50

Meeting
Commons
12:50 - 1:20

Intro of Closing Speaker
Commons (lower level)
3:25 – 3:30

Randy Nichols
Associate Professor of Mathematics, Delta College

Closing Speaker

Commons (lower level)
3:30 - 4:15

"Instruction vs Teaching"
Dr. Vilma Mesa

Associate Professor of Education and Mathematics
University of Michigan, Ann Arbor, MI

BIG Door Prizes
4:15 - 4:30

(Winners MUST be present.)

Wi-Fi Log-in
Username: deltamath
Password: epu417

Keynote Presentations

We are excited to introduce **Linda Braddy**, Vice President for Academic Affairs at Tarrant County College, who will deliver our morning keynote!

Linda Braddy is Vice President for Academic Affairs at Tarrant County College (TCC) Northeast Campus. She previously served as Deputy Executive Director of the Mathematical Association of America (MAA) in Washington, D.C. (2012-2016), where she oversaw MAA programs, public policy efforts, the Competitions Department, and the Meetings and Facilities Department. While at MAA, she increased the externally funded programs portfolio from $8 million to $14.5 million.

From 2009 to 2012, she served as dean of the Division of Health and Natural Sciences and subsequently as dean of the Division of Mathematics and Natural Sciences at TCC's South Campus. Prior to her tenure at TCC, she was chair of the Department of Mathematics at East Central University (ECU) in Ada, Oklahoma, as well as a tenured, full professor.

Throughout her tenure at ECU, she directed professional development programs for K-12 mathematics teachers and other grant-funded initiatives to improve the teaching and learning of mathematics, directed initiatives to redesign courses and programs, and won multiple teaching awards at the local and regional levels. She received her Ph.D. in mathematics from the University of Oklahoma and her research area is undergraduate mathematics education.

A warm welcome is given to **Vilma Mesa**, Associate Professor of Education and Faculty Associate at the Center for the Study of Higher and Postsecondary Education at School of Education and Associate Professor of Mathematics, College of Literature Sciences, and Arts. She will deliver the closing presentation today.

Dr. Mesa investigates the role that resources play in developing teaching expertise in undergraduate mathematics, specifically at community colleges and in inquiry-based learning classrooms. She has conducted several analyses of instruction and of textbooks and collaborated in evaluation projects on the impact of innovative mathematics teaching practices for students in science, technology, engineering, and mathematics. She served as Associate Editor for the *Journal for Research in Mathematics Education* from 2000-2004 and is currently serving as associate editor for *Educational Studies in Mathematics* and in the editorial board for the *International Journal for Research in Undergraduate Mathematics Education, Revista EMA* and *Revista Pensamiento Numérico Avanzado*. She was the 2010 recipient of Evan G. Pattishall and Helen Geib Pattishall Faculty Enhancement Award for Junior Faculty at the University of Michigan. She has been principal investigator in several NSF and IES funded projects. She is a Fulbright Scholar. She was a research associate at “una empress docente” a research center in Mathematics Education at the University of Los Andes, in Bogotá, Colombia where she co-authored university textbooks for pre-calculus for engineering and probability and statistics for social science majors. She has published over 40 articles in mathematics education. Prior to her career in education, Mesa was a system programmer for the ministry of finances in Colombia and for the district of Bogota, and systems advisor for a large firm in Colombia. She has a B.S. in computer sciences and a B.S. in mathematics from the University of Los Andes in Bogotá, Colombia, and a master’s and a Ph.D. in mathematics education from the University of Georgia.

2016 MichMATYC Fall Conference – Saturday, October 15

8:15-9:00	BREAKFAST/REGISTRATION/WELCOME **Dr. Jean Goodnow,** President, Delta College **Jim Ham**, President-Elect AMATYC						
9:00-9:50	**Dr. Linda Braddy** Vice President for Academic Affairs, Tarrant County College (TCC) Northeast Campus						
Room # →	**Pathways J134**	**Pathways J135**	**Common Core/ Dual Enrollment J136**	**Software J137**	**Classroom Nuggets J138**	**Classroom Nuggets J139**	**Panels J132**
10:00-10:50	Beidoun, LaRose Haidar, Zopf, Zalzali, Bazzi	Ham	Terwillegar	McGraw-Hill Education*	Piercey, Militzer, Venkatesh, Cullen, Smith, Fagan	Ross*	Brown* [in computer **J130**]
11:00-11:20	Networking	Sikorski, Morford	Panel (J132)	Neitzke	Hoag	Redman	**High School PANEL**
11:30-11:50	Networking		Panel (J132)	Oaks	Gunkelman	Cunningham	
12:00-12:50	LUNCH						
12:50-1:20	MichMATYC **BUSINESS MEETING**						*SPECIAL* ST Explorer T
Room # →	**Pathways J134**	**Pathways J135**	**Common Core/ Dual Enrollment J136**	**Software J137**	**Classroom Nuggets J138**	**Classroom Nuggets J139**	**Panels J132**
1:30-1:50	Chapman, Rotman	Bouthillier	Hodges, Griffin	Woodbury*	Oaks	Kelch	**Accessibil PANEL**
2:00-2:20		Gunkelman		Woodbury*		VanderMale, Saldivar	
2:30-2:50	Panel (J132)	Panel (J132)	Networking	Rosin	Pinner	ADJUNCT ROUNDTABLE	**Pathway PANEL**
3:00-3:20	Panel (J132)	Panel (J132)	Networking	Chadwick*	Conway		
3:30-4:15	**Dr. Vilma Mesa** Associate Professor of Education and Mathematics, University of Michigan						
4:15-4:30	THANK YOU and ***BIG*** DOOR PRIZES						

STEM Explorer Mobile Laboratory tours are offered from 11:00-11:20, 11:30-11:50, 1:30-1:50, 2:00-2:20, with a special K-12 tour from 12:50

Time: 10:00 - 10:50	**Room:** J-134
Presenters: Nasser Beidoun, Jennifer LaRose, Nahla Haidar, Deborah Zopf, Michael Zalzali, Sam Bazzi	
Title: Finding the *Best Fit* Pathway for Developmental Math Students	
Abstract: The Best Fit Project combines the benefits of a traditional classroom format with the computer-mediated classroom (redesign). Instead of relying on students to "self-select" the best learning environment for themselves when registering for classes; instructors work with and assess students for three weeks, and then guide students into the classroom format which they believe is the best fit for each student to be successful and retained. Logistics and four semesters of results will be discussed.	
Nasser Beidoun, Jennifer LaRose, Nahla Haidar, Deborah Zopf, Michael Zalzali and **Sam Bazzi** are all full-time math faculty at Henry Ford College in Dearborn, MI. They come with a variety of teaching backgrounds, including teacher education, statistics, developmental mathematics, and upper-level mathematics; and have experience teaching in a variety of formats, including traditional classrooms, online classes, and redesign classes. Although they come from diverse teaching backgrounds, they share a common interest in promoting student success and finding creative ways to address the needs of individual students.	

Time: 10:00 - 10:50	**Room:** J -135
Presenter: Jim Ham	
Title: Modeling in the Pathways	
Abstract: AMATYC is planning the next sequel in the Crossroads series on standards for mathematics in the first two years of college. The MAA, through its Common Vision project, is considering changes to the undergraduate mathematics curriculum. Other publications have called for the modernization of the undergraduate mathematics curriculum. Mathematical modeling is a topic identified as needing increased attention in all of these national reports. Several modeling problems included in courses in the first two years of college, particularly in the non-STEM pathway, will be shared.	
Jim Ham has been teaching at Delta College since 1994. He has been a member of MichMATYC since 1994 and has served as President from 1999-2001. He regularly teaches statistics, finite mathematics, liberal arts mathematics, calculus, and algebra. Jim is also active in AMATYC, where he is currently serving as President-Elect.	

Time: 10:00 - 10:50	**Room:** J -136
Presenter: Joseph Terwillegar	
Title: Flip or Flop: Flip Classrooms at High School Level	
Abstract: This talk discusses how the flipped classroom has been utilized in Geometry, Precalculus, and AP Calculus. Techniques for flipping are addressed as well as the new sets of advantages and disadvantages as opposed to the traditional classroom.	
Joseph Terwillegar has taught at Harbor Beach High School the past 6 years, teaching Geometry, Biology, AP Biology, AP Calculus, Precalculus, Anatomy, and Statistics. He has his Bachelor's degrees in mathematics and biology from Saginaw Valley State University.	

Time: 10:00 - 10:50	**Room: J137**

Presenter: McGraw-Hill Education

Title: ALEKS

Abstract: As a leading Learning Science Company, McGraw-Hill Education delivers the most effective, efficient, and engaging educational technology today. ALEKS is that technology. ALEKS uses artificial intelligence to precisely map what each student knows, doesn't know, and is most ready to learn in a given course area. The system interacts with each student like a skilled human tutor, delivering a cycle of highly individualized learning and assessment that ensures mastery. Students are shown an optimal path to success, and instructors have the analytics they need to deliver a data-informed, impactful learning experience.

At **McGraw-Hill Education**, we believe that our contribution to unlocking a brighter future lies within the application of our deep understanding of how learning happens and how the mind develops. It exists where the science of learning meets the art of teaching.

Time: 10:00 - 10:50	**Room:** J138

Presenters: Victor Piercey, Erin Militzer, and Anil Venkatesh, Roxanne Cullen, Melissa Smith, and Deirdre Fagan (Ferris State University, Languages and Literature)

Title: The Unexpected Partnership Between Math and English: A Public Reflection

Abstract: Over the last three years, we have created freshmen learning communities centered on linking general education mathematics courses with first-year writing courses. While we expected that the students would benefit, we were surprised to find that we as faculty grew into a learning community. We will share what we have learned from one another so far and what we anticipate the future holds for this project.

Victor Piercey received his Ph.D in mathematics from the University of Arizona in 2012. Dr. Piercey also holds a B.A. in Humanities from Michigan State University, a law degree from Columbia University, and a M.S. in Mathematics from Michigan State University. He practiced law in the New York office of Weil, Gotshal, & Manges LLP for two years before returning to Michigan for a career in Mathematics. Dr. Piercey began working as an assistant professor in the mathematics department at Ferris State University in the Fall of 2012.

Erin Militzer received her Bachelors of Science in Mathematics at Central Michigan University in 2004. In 2010, Erin joined the Mathematics Department at the University of Arizona as a Teaching Postdoctoral Fellow. In the summer of 2012, she was a faculty mentor for a NSF-REU at Central Michigan University.

Anil Venkatesh is a teacher, scholar, musician, and game designer. He earned a B.A. in mathematics and a B.S.E. in electrical engineering at the University of Pennsylvania, and pursued graduate studies at Duke University, where he earned a Ph.D. in mathematics.

Roxanne Cullen is professor of English at Ferris State University where she has held a variety of positions since joining the faculty in 1983. She held numerous administrative posts before returning to faculty in 2007.

Melissa Sara Smith has a PhD in English Studies from Illinois State University, and she specializes in Children's and Young Adult Literature. She teaches a variety of courses in literature and composition.

Deirdre Fagan is an assistant professor in the Languages and Literature Department at Ferris State University. She is the author of Critical Companion to Robert Frost and has published articles, fiction, nonfiction, and poetry in a variety of academic and literary journals.

Time: 10:00 - 10:50	**Room:** J139
Presenter: Rachel Ross	
Title: Pearson non-STEM Solutions for Emerging Pathways Courses	
Abstract: Pathways models typically encourage non-STEM students to take an alternate track through their developmental math requirements, often times accelerating them while adding a greater emphasis on math in context. In this session, Pearson Senior Editor, Rachel Ross, will briefly discuss emerging trends in pathways courses as seen from her conversations around the country, including some commonalities and differences in approaches. She will also briefly overview the newest, non-STEM pathways solutions from Pearson, including Almy/Foes Math Lit 2nd edition, the Dana Center's Mathways Project, Bob Blitzer's Pathway to College Mathematics, and Jay Lehmann's Pathway to Introductory Statistics.	
Rachel Ross is a Senior Editor at Pearson.	

Time: 10:00 - 10:50	**Room:** J130
Presenter: Bacari K. Brown	
Title: Knewton	
Abstract: With Knewton, every student gets a more personal learning experience. Teachers, schools, and education companies around the world use Knewton to power digital course materials that dynamically adapt to each student's unique needs. Knewton provides students with tailored recommendations for exactly what to study, teachers with analytics to better support each student, and publishers with content insights to develop more effective digital products.	
Materials: Computer Lab	
Bacari Brown was the first member of the Institutional Partnerships team at Knewton. He helps raise awareness for their new Direct to Institution Course Solutions. He has been at Knewton for 4 years. He had been on the Pearson team for 10 years prior to that.	

Presentations by Time **11:00 - 11:50**

Time: 11:00 - 11:50	**Room:** J135

Presenters: Pavel Sikorskii, Jeff Morford

Title: The Right Math at the Right Time Task Force

Abstract: The Right Math at the Right Time Task Force is a cross-institutional, state-wide group of Michigan educators who are working to improve students' success in gateway mathematics courses by aligning these courses across institutions, supporting program faculty in choosing the right math pathway for their students, and promoting research based solutions for mathematically underprepared students. This work is supported by the Michigan Center for Student Success through a Dana Center grant and draws from successful approaches sponsored by the Dana Center in other states. Please, come find out more about the work of the group and its proposal for improving mathematics higher education in Michigan.

Pavel Sikorskii has been working in the Department of Mathematics at Michigan State University for over a decade. He has taught most of the undergraduate level mathematics courses from Intermediate Algebra to senior level courses at MSU. He has served as a leader or key personnel on numerous research projects funded by NSF, NIH, DOW Foundation, and other agencies. Pavel Sikorskii's service to the educational community has been recognized by Departmental, College, University, and State Awards. His current position in the Department of Mathematics is Co-Director of Undergraduate Studies. He plays key role in coordinating all aspects of the undergraduate mathematics program at MSU. Pavel Sikorskii is currently overseeing the transformation of gateway mathematics courses at MSU with the overarching goals of improving student outcomes, reducing time to degree, improving graduation rates, and STEM recruitment and retention.
Jeff Morford teaches math at Henry Ford College. He has provided leadership in the developmental area, led the Learning Lab at times during his tenure there. He is currently interested in making sure students get the right math to succeed in their programs in the shortest time possible.

Time: 11:00 - 11:50	**Room: J132**

Panel: High School Issues
Everyone is welcome to join in a question/answer session regarding issues related to Common Core, dual enrollment, and other issues which affect both K-12 and undergraduate educators.

Organizer: Tim Allen, Delta College
Panelists: Dr. Jill Griffin, Michigan Department of Education
Ruth Anne Hodges, Michigan Department of Education
Joseph Terwillegar, Harbor Beach High School

Dr. Jill Griffin is the Urban and Math Education consultant for the Michigan Department of Education. She owns her own mathematics tutoring business in a local community.
Ruth Anne Hodges is the manager of the Curriculum & Instruction Unit at the Michigan Department of Education and teaches developmental mathematics courses at a local community college.
Joseph Terwillegar has taught at Harbor Beach High School the past 6 years, teaching Geometry, Biology, AP Biology, AP Calculus, Precalculus, Anatomy, and Statistics. He has his Bachelor's degrees in mathematics and biology from Saginaw Valley State University.

This time slot also includes several 20-minute sessions.

Please see next two pages for these sessions.

Presentations by Time **11:00 - 11:20**

Time: 11:00 - 11:20	**Room:** J137
Presenter: Tammy Neitzke	
Title: Engaging Students in Liberal Arts Math, Voting Methods: Determining A Winner May Not Be As Easy As 1, 2, 3	
Abstract: Depending on the method used to tally votes, the same data may produce different winners. This presentation will provide an overview of the Borda Count, the pairwise comparison, and the plurality with elimination voting methods.	
Tammy Neitzke is an instructor at Central Michigan University where she has been teaching math modeling for the past five years. Prior to this, she taught at Sacred Heart Academy high school where she restructured the high school mathematics program.	

Time: 11:00 - 11:20	**Room:** J138
Presenter: Barbie Hoag	
Title: The Test - Now What?	
Abstract: What if there was a chance for a student to redeem a poor test score? Over the past few semesters I have tried some different techniques for encouraging students to continue learning after the assessment. So often once the 'test' is over the students move on or get stuck regardless if they really know the material or not. The students who didn't perform well on the test flounder the rest of the semester. What if there is a chance to redeem a poor test score?!? I can share what I have done and the results that I have had.	
Barbie Hoag teaches at Oakland Community College - Auburn Hills campus. She is in her fifth year of teaching full time. She spends most of her time working on the non-STEM math pathway. She currently is working on the Guided Pathways initiative at OCC, the Michigan Task Force for Designing Math Pathways and has served as a facilitator for the Dana Center New Mathways Project. Outside of teaching, Barbie has a husband, three kids and a dog and enjoys gardening and CrossFit.	

Time: 11:00 - 11:20	**Room:** J139
Presenter: David Redman	
Title: Miura-Ori Folding: Art and Engineering	
Abstract: From "automobiles" to "zipper tubes", origami has you covered and has recently been one of the hottest topics of research in art, mathematics, chemistry, engineering, material science, medicine, and many other fields. Come see some interesting examples and models that you can take back to your classroom, and create your own metamaterial that you can take home and experiment with. The presenter will share handouts and books that you can use in your classroom.	
David Redman is motivated by finding fun and unconventional ways to illustrate concepts in mathematics. He enjoys helping people re-examine their expectations of what mathematics is and is not. David is in the last year of his term as division chair at Delta College and is excited to be soon taking a more active role in the classroom.	

Time: 11:00 - 11:20	**Take a Tour of the STEM Mobile Explorer**

Presentations by Time **11:30 - 11:50**

Time: 11:30 - 11:50	Room: J137
Presenter: Jonathan Oaks	
Title: AMATYC Update	
Abstract: AMATYC is The American Mathematical Association of Two-Year Colleges. Whether you have never heard of AMATYC or you have been involved with the organization for years, come to this presentation to get your questions answered about what is new in the organization and how you can become involved. Take advantage of this session to assist you in making the most of the professional development opportunities that are offered by AMATYC throughout the year.	
Jon Oaks has been a math professor at Macomb Community College in Warren, MI, since 2011. He was the Professional Development Coordinator for AMATYC and is currently the AMATYC Midwest Vice President. Jon enjoys integrating technology, cultural awareness, and service learning into his courses.	

Time: 11:30 - 11:50	Room: J138
Presenter: Julie Gunkelman	
Title: Five Tips for Successful Flipped Classes	
Abstract: Thinking about flipping your first class? Tried flipping your class but were not happy with the results? Whether you are flipping a preparation for Algebra or Calculus class, there are five key ingredients to successful flipped classroom pedagogy. Come and learn these course structure must haves from an instructor who has flipped seven different classes.	
Julie Gunkelman is a full-time mathematics faculty member at Oakland Community College. She earned her B.S. in Mathematics from Michigan State University and her M.A. in Mathematics from Eastern Michigan University. Julie has taught a variety of courses including the traditional STEM sequence through Calculus III, Math for Elementary School Teachers and two non-STEM courses she helped develop at Oakland Community College, Math Literacy and Quantitative Reasoning. She uses technology and a variety of teaching strategies in her classes. She is currently serving AMATYC as the Professional Development Coordinator. Julie, her husband Mike, and their two children reside in Novi, Michigan.	

Time: 11:30 - 11:50	Room: J139
Presenter: Bernard Cunningham	
Title: A Smorgasbord of Mathematical Tools for the College Mathematics Instructor	
Abstract: A short time ago, a night show host would share his (the staff's) Top Ten List during his show. I also have a list of mathematical stuff (technical term) that will not number 10 that should be shared with other Mathematics' Instructors. The following is a short list: synthetic multiplication, Pascal's Triangle, linear regression from matrices, Cubic and Quartic Formulas similar to the Quadratic Formula, a special Trigonometric Identity, and the nth term of an arithmetic sequence. Yep, all this in 20 minutes!	
Bernie Cunningham is a C.S. Mott Community College Mathematics Instructor.	

Time: 11:30 - 11:50	**Take a Tour of the STEM Mobile Explorer**

Presentations by Time **1:30 - 2:20**

Time: 1:30 - 2:20	Room: J134

Presenters: Mark Chapman, Jack Rotman

Title: Math Literacy Without A Math Prerequisite

Abstract: Lansing Community College has dropped all courses below the beginning algebra level. To serve students, we are developing a variation of our Math Literacy course ... without a math prerequisite. This session will give a little background, provide tons of operational details, and even the experience of a sample lesson from this new course.

Mark Chapman is a Professor at Lansing Community College. He received his Master in Math Education from Grand Valley State University. Throughout his career, Mark has taught a gamut of courses ranging from basic arithmetic to calculus. In addition to his passion for math and math education, Mark enjoys playing guitar, cooking, and golfing.
Jack Rotman is a Professor at Lansing Community College, teaching primarily developmental mathematics courses since 1973. Jack has been active in MichMATYC and AMATYC. Since 2008, Jack has led the AMATYC "New Life Project" which includes two courses -"Mathematical Literacy, and Algebraic Literacy.

Time: 1:30 - 2:20	Room: J136

Presenters: Jill Griffin, Ruth Anne Hodges,

Title: High School to College: Bridging the Math Gap through Competencies

Abstract: The Common Core State Standards for Mathematics can be summarized into 3 competencies that students should be bringing from high school to college. Participants will discuss ways to leverage the competencies so students transition successfully into post-secondary options.

Dr. Jill Griffin is the Urban and Math Education consultant for the Michigan Department of Education. She owns her own mathematics tutoring business in a local community.
Ruth Anne Hodges is the manager of the Curriculum & Instruction Unit at the Michigan Department of Education and teaches developmental mathematics courses at a local community college.

Time: 1:30 - 2:20	Room: J138

Presenters: Jonathan Oaks

Title: Vocabulary and Critical Thinking in the Mathematics Classroom

Abstract: In this presentation, the presenter will share some activities that he has used to help students in his math courses improve their mathematical vocabulary and literacy. He will also share some prompts that he uses to help students with critical thinking. All of these activities are short and can easily be adapted for any mathematics class.

Jon Oaks has been a math professor at Macomb Community College in Warren, MI, since 2011. He was the Professional Development Coordinator for AMATYC and is currently the AMATYC Midwest Vice President. Jon enjoys integrating technology, cultural awareness, and service learning into his courses.

There is also a terrific panel discussion and several 20-minute sessions being held at this time slot! Please see the next two pages.

Presentations by Time | **Room: J132** | **1:30 - 2:20 (continued)**

PANEL: Accessibility in Mathematics Classes

Faculty across Michigan is committed to providing access to programs and facilities for all students. This session will focus on strategies to facilitate the study of mathematics for students with special needs.

Organizer: Frances Lichtman, Delta College
Panelists: Adam Cloutier, Henry Ford College
Darwin Hancock, Delta College student
Monica Reyes, Saginaw Valley State University
Angela Sebald, Michigan State University
Melissa Wallace, Delta College

As the Director of Teaching and Learning Services at Henry Ford College, **Adam L. Cloutie**r oversees planning, implementing, and evaluating services within Henry Ford College's Tutoring Center, Library, Instructional Technology and Online Learning Support, Center for Teaching Excellence and Innovation, and Curriculum Support. He teaches an online math class as an adjunct, is a former full-time mathematics instructor, recently chaired an accessibility committee at HFC, and is implementing a process to help build and improve accessibility at Henry Ford College.

Darwin Hancock, who is legally blind, has successfully completed a course in Intermediate Algebra at Delta College.

Monica Reyes currently serves as the Director of Disability Services and the Director of the Great Lakes Bay Hispanic Leadership Institute. She is a graduate of SVSU earning her MBA and Bachelor's in Human Resources, Accounting & Organizational Development. Mrs. Reyes is certified as a Trainer from the American Society of Training Development (ASTD), certified as a Business Solutions Professional from Michigan State University- School of Labor & Management-2008, Senior Professional in Human Resources (SPHR) from the National Society of Human Resource Management, and has a Certified Public Manager (CPM) from the National Consortium Board of CPM's. Monica's background includes Training, Human Resources, ADA Laws, Disability Accommodations, Leadership Development, Program Management, and Development. Monica was recently appointed to the Michigan Department of Civil Rights/Hispanic Latino Commission of Michigan by the Governor. She serves on and volunteers countless hours to several nonprofits in the region.

Angela Sebald is a Blindness/Visual Impairment and Media Access Specialist at the Resource Center for Persons with Disabilities at Michigan State University. Prior to her position at Michigan State University, Angela was the Braillist/Media Specialist for the Saginaw Intermediate School District. Angela worked for the district for ten years, producing literary Braille, Nemeth (math) Braille and tactile graphic format. She graduated from Western Michigan University in 2013 with a Master's Degree in Teaching for the Visually Impaired.

Melissa Wallace is the Director, Office of Disability Resources, at Delta College. She has a Master's of Social Work from Wayne State University and practices the social justice perspective in her work with students, faculty and staff. In addition to working with approximately 400 students registered with the Office of Disability Resources, Melissa is a co-chair of the Accessibility Task Force and has co-written grants to bring mindfulness and faculty and social support to students with autism in the Delta College community.

Time: 1:30 - 1:50	**Room:** J135
Presenter: Barbara Bouthillier	
Title: Training and Supporting Adjunct Developmental Math Faculty to Implement Innovative Instruction	
Abstract: A focus on moving students through math sequences more quickly and the current move toward math pathways has resulted in a call for new types of curriculum. Best practices include utilizing computer modules, just-in-time remediation, contextualized applications, and more emphasis on conceptual understanding. As many developmental and general education math courses are taught by adjunct faculty, these initiatives have created a need to train and support adjunct faculty to implement new types of instruction. Based on a review of the literature, a survey of adjunct faculty, and feedback from a pilot Faculty Learning Community, this presentation will offer a guide for developing training and subsequent support for adjunct developmental math faculty who are called upon to implement innovative instruction.	
Barb Bouthillier has been adjunct developmental math faculty at Grand Rapids Community College for 6 years. She just finished her doctorate in Community College Leadership through Ferris State University. The focus of her studies was student success and completion, with a special focus on strategies for helping students master the math required for higher education and life.	

Time: 1:30 - 1:50	**Room:** J137
Presenter: Matt Woodbury	
Title: Mathematica in the Modern Classroom	
Abstract: Mathematica is used as an instructional tool in high school and college classrooms all over the world. This technical talk will show live calculations in Mathematica 11 and other Wolfram technologies relevant to teaching. No prior knowledge of Mathematica is required.	
Matt Woodbury works in academic outreach at Wolfram Research. He specializes in helping high school and college campuses utilize Mathematica in courses and research projects.	

Time: 1:30 - 1:50	**Room:** J139
Presenter: Beth Kelch	
Title: College-level Flashcards	
Abstract: There are activities for the mathematics classroom that effectively promote student engagement and are also fast and simple. Believe it or not lowly flashcards actually promote discussion, keep students focused and add to the learning process. Materials used successfully in classes from Basic Math to Trigonometry will be shared.	
Beth Kelch has been teaching at Delta for 14 years, primarily in developmental math. She was inspired by here first class of Basic Math students to return to school and earn her Masters' degree in math education. She particularly enjoys hearing the "buzz" of a classroom with students fully engaged in helping each other learn math.	

Time: 1:30 - 1:50	**Take a Tour of the STEM Mobile Explorer**

Time: 2:00 - 2:20	**Room:** J135
Presenter: Julie Gunkelman	
Title: Communication for Successful Pathways Courses	
Abstract: Ready to offer a non-STEM pathway for mathematics? Educating all of the key players when offering a new course can be challenging. The focus of this session will be lessons learned from sharing information about two new courses at Oakland Community College with faculty, administration, counselors and students.	
Julie Gunkelman is a full-time mathematics faculty member at Oakland Community College. She earned her Bachelor of Science in Mathematics from Michigan State University and her Master of Arts in Mathematics from Eastern Michigan University. Julie has taught a variety of courses throughout her career including the traditional STEM sequence through Calculus III, Math for Elementary School Teachers and two non-STEM courses she helped develop at Oakland Community College, Math Literacy and Quantitative Reasoning. She uses technology and a variety of teaching strategies in her classes. Julie is an active member of AMATYC and MichMATYC. She is currently serving AMATYC as the Professional Development Coordinator. Julie, her husband Mike, and their two children reside in Novi, Michigan.	

Time: 2:00 - 2:20	**Room:** J137
Presenter: Matt Woodbury	
Title: What's New in Mathematica	
Abstract: Mathematica's extensive library of more than 5000 built-in functions is always expanding. This talk will explore some of the new and improved functionality from the recent Mathematica 11 release. Topics will include: 3D printing, geographic visualization, new methods for plot labeling and more ...	
Matt Woodbury works in academic outreach at Wolfram Research. He specializes in helping high school and college campuses utilize Mathematica in courses and research projects.	

Time: 2:00 - 2:20	**Room:** J139
Presenters: Meghan VanderMale, Alejandro Saldivar	
Title: The Game of Domino and Proofs of Trigonometric Identities	
Abstract: We show an activity similar to the game of Domino that we anticipate will help learners develop and write correct proofs for trigonometric identities.	
Meghan VanderMale and Alejandro Saldivar are full-time mathematics faculty at Grand Rapids Community College.	

Time: 2:00 - 2:20	**Take a Tour of the STEM Mobile Explorer**

Presentations by Time **2:30 - 3:20**

Time: 2:30 - 3:20	**Room: J132**

Panel: Mathematics Pathways
This session will address:

- Pathways designed to accelerate students' progress from developmental mathematics to a college-level course as replacements for the traditional Pre-algebra/Beginning Algebra/Intermediate Algebra route.
- Courses that reflect the mathematics pathways described in the Michigan Transfer Agreement.
- Pathways leading to alternatives to College Algebra that are aligned to targeted programs of study.

Organizer: Frances Lichtman, Delta College
Panelists: Peter Carlson, Delta College Jeff Morford, Henry Ford College
Anna Cox, Kellogg Community College Jack Rotman, Lansing Community College
Bernard Cunningham, Mott Community College

Peter Carlson is a Professor of Mathematics at Delta College. In his 25 years at the College, he has taught classes ranging from developmental mathematics through the transfer sequence. Peter is currently involved in the review of the College's developmental math program.
Anna Cox has been an educator since 1988 and has been a full-time mathematics professor at Kellogg Community College since 1995. Anna also taught in the Virgin Islands and Brazil, where she encountered alternative approaches to teaching mathematics. She assisted with the development of pathways at Kellogg Community College by redesigning courses through investigating the needs of Kellogg Community College students. A dedicated member of the mathematics community, Anna is currently President-Elect of MichMATYC. Anna loves to share and learn. Contact her at coxa@kellogg.edu.
Bernie Cunningham is a C.S. Mott Community College Mathematics Instructor.
Jeff Morford has a bachelor's degree in mathematics from Michigan State University and a master's degree in mathematics from The University of California at Berkeley. He has taught college mathematics for over 20 years, spending most of that time at Henry Ford College. Recently, his professional focus has been developing and encouraging the development of rigorous, relevant courses for students outside of the STEM pathway.
Jack Rotman is a Professor at Lansing Community College, teaching primarily developmental mathematics courses since 1973. Jack has been active in MichMATYC and AMATYC. Since 2008, Jack has led the AMATYC "New Life Project" which includes two courses -"Mathematical Literacy, and Algebraic Literacy.

Time: 2:30 - 3:20	**Room: J139**

Panel: Adjunct ROUNDTABLE
Join your colleagues in discussing some of the joys and concerns experienced by adjunct mathematics instructors. This is open to adjunct, full-time, and potential faculty.

Organizer: Tim Allen, Delta College
Panelists: Katie Grappin, Delta College; Pam Jackson, Oakland Community College; Mark Sprygada, Delta

Katie Grappin earned her Bachelor's in Math and History Education at Saginaw Valley State University and her Master's in Math from University of Michigan - Flint. She is currently working on an Achieving the Dream Grant focused on engaging adjunct instructors in student success. She has been an adjunct instructor at Delta College for 5 years.
Mark Sprygada is a ten year adjunct in Mathematics all at Delta College. He teaches Developmental through Intermediate Algebra classes. Mark returned to teaching after a 35 year career as a professional photographer.

This time slot also includes several 20-minute sessions.

Please see next page for these sessions.

Presentations by Time **2:30 - 2:50**

Time: 2:30 - 2:50	**Room:** J137
Presenter: Steve Rosin	
Title: DESMOS in the Classroom	
Abstract: Learn how to easily incorporate the DESMOS Graphing Calculator in your classroom for both student use and instructor demonstrations. Sample graphs with slides will be shared with participants.	
Steve Rosin started teaching electronics at Delta College in the Winter of 1992. He has been a professor in the Math Division since 2011. Prior to that he served as Chair of the Technical Trades and Manufacturing Division for 9 years.	

Time: 2:30 - 2:50	**Room:** J138
Presenter: Myung Pinner	
Title: From a Role Model to Another	
Abstract: If you are looking for a way of engaging students from day one, I encourage you to come to my session. I will share three things that you could use on your first day of any math course. If you didn't know that you were a role model, mathematically, I will reveal it for you. You could share your fun number tricks if we have time too!	
Myung Pinner is married and has a son that is a high school senior. Twenty-four years ago she came to the United States. She likes to spend her leisure time gardening, quilting, singing, and watching the same movies over and over (PG-13 light romantic comedy and Disney movies).	

Time: 3:00 - 3:20	**Room:** J137
Presenter: Brian Chadwick	
Title: Implementing a Fully Online Summer Bridge Course to Prepare Students for College Algebra	
Abstract: For many years, the mathematics department at Michigan State University has run an online summer bridge program designed for students who placed at a level of readiness lower than College Algebra. Students wo were close to being eligible for admittance into College Algebra were approached and invited to take part in this program. With the omission of older software systems, we transitioned this program to WebAssign last year and utilized it as a course management tool and delivery platform. This made available new options such as video-embedding, attaching documents, pulling problem sets from multiple resources, and personalizing a curriculum so that students could maximize their learning experience. Additionally, handling assessments in a fully online environment made this program accessible to all. Come see the results and inquire as to how WebAssign can be an option for meeting similar goals you have in running a fully online course.	
Brian Chadwick has been involved with numerous mathematics summer bridge programs at Michigan State University. He has a Master's degree in curriculum development as well as 10 years High School math teaching experience.	

Time: 3:00 - 3:20	**Room:** J138
Presenter: Wendy Conway	
Title: Uniform Torture Method to Increase in Class Engagement	
Abstract: An introduction on how to increase engagement/participation in class and boost attendance in class by requiring students to answer or ask a question in each class. How to introduce the method and get student buy-in. If time permits, two more methods for class engagement will be discussed; blessing in the universe letters and charity projects.	
Wendy Conway has been a faculty member at Oakland Community College since 2007. Prior to that she taught high school for 5 years at Pontiac Central High School while teaching as adjunct faculty at OCC, EMU and Schoolcraft colleges. Wendy is a former Michigan Representative to AMATYC and has presented at MichMATYC in the past.	

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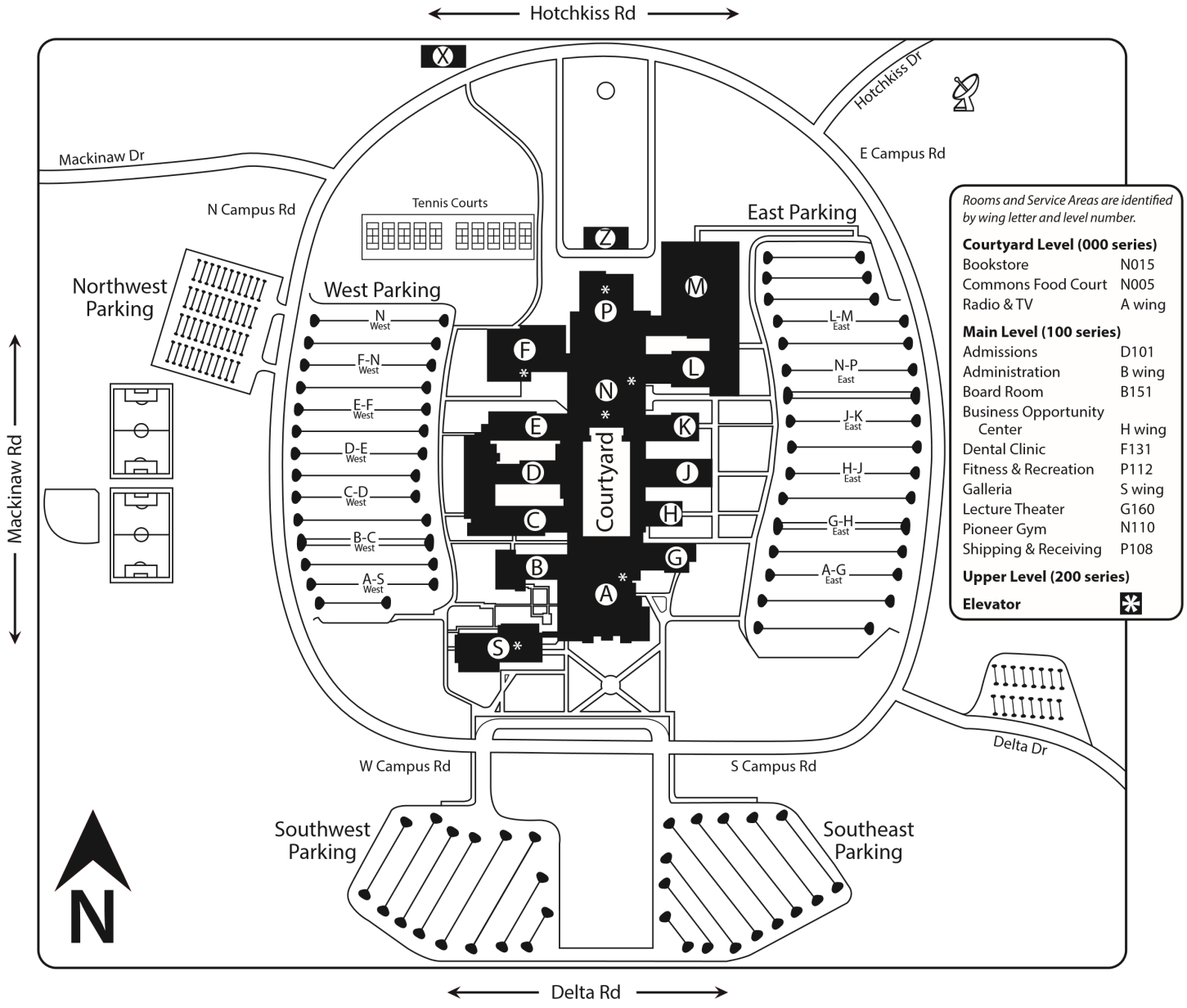

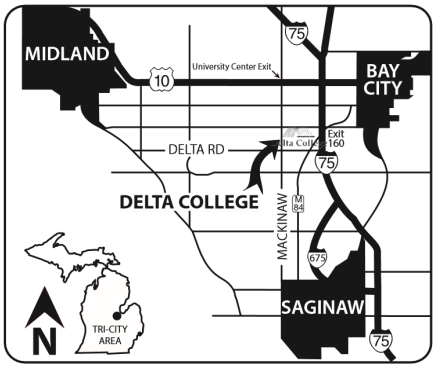

From I-75
Take exit 160. Turn south onto M-84.
Travel 1/4 mile to the second traffic light.
Turn west onto Delta Road.
Travel 1-1/4 miles. College is on the right.

From US-10
Exit south at Mackinaw Road exit onto Mackinaw Road.
Travel south 2-1/4 miles, past the blinking light at Hotchkiss Road.
College entrance is on the left.

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Friday, October 14, 2016

"Discovering the Art of Mathematics"
Dr. Brian Jennings, Westfield State University

This workshop was sponsored, in part, by an
AMATYC Traveling Workshop Grant.

The MichMATYC 2016 Conference Team

Mary M. Roberson, Conference Chair
B. David Redman, Jr., Mathematics Division Chair

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Mary Roberson, Sascha Rivet, B. David Redman, Jr., Frances Lichtman

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