ArizMATYC Conference

February 8, 2019

Promoting Equity and Access through Mathematics

Hosted by

PHOENIX COLLEGE
A MARICOPA COMMUNITY COLLEGE

Program

7:30 – 8:20	**Breakfast/Registration**	*Bulpitt Auditorium*
8:25 – 8:40	**Welcome**	*Bulpitt Auditorium*

- Dr. Larry Johnson – President, Phoenix College
- Shannon Ruth – President, ArizMATYC
- Kathryn Kozak – President-Elect, AMATYC

8:40 – 9:20	**Keynote Address**	*Bulpitt Auditorium*

- Dr. Uri Treisman – Executive Director, Charles A. Dana Center

9:30 – 10:15	**Breakout Sessions 1**	*See program overview*
10:30 – 11:15	**Breakout Sessions 2**	*See program overview*
11:30 – 12:25	**Lunch**	*Hacienda Room - F121*
12:30 – 1:40	**Campus reports**	*Hacienda Room - F121*
1:45 – 3:30	**ATF Meeting**	*B229*
1:45 – 2:30	**Breakout Sessions 3**	*See program overview*
2:45 – 3:30	**Breakout Sessions 4**	*See program overview*
3:45 – 4:45	**Business Meeting**	A*201*

9:30 – 3:30	**Vendor Tables**	*Hacienda Room - F121*

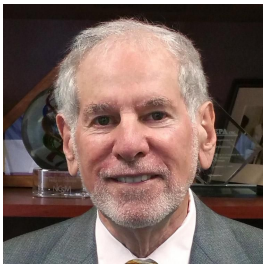
- *Derivita*
- *Knewton*

Pre-conference kickoff

7:00 – 8:00	**Calculus: The Musical**	*Bulpitt Auditorium*

- Evening performance - Thursday, February 7th
- Free to the public – arrive 20 minutes early to ensure parking and a good seat

Program Overview



Keynote Speaker

Philip Uri Treisman

Executive Director, Charles A. Dana Center

University of Texas at Austin

From Scaling Pilots to Change at Scale: Next Steps in Developmental Education Reform

My talk will explore lessons learned—both inspiring and troubling—from campuses and systems making fundamental changes in gateway mathematics courses. I'll describe the political, economic, and demographic pressures leading to these changes and their implications for faculty leaders. A special focus will be on equity and how new instructional and administrative practices might lead to new approaches to a perennial challenge.

Philip Uri Treisman is a University Distinguished Teaching Professor, professor of mathematics, and professor of public affairs at The University of Texas at Austin. He is the founder and executive director of the University's Charles A. Dana Center, an organized research unit of the College of Natural Sciences.

Professor Treisman has received numerous honors and awards for his efforts to strengthen American education. For his research at the University of California at Berkeley of the factors that support high achievement among minority students in calculus, he received the 1987 Charles A. Dana Award for Pioneering Achievement in American Higher Education. In 1992, he was named a MacArthur fellow. In December 1999, he was named one of the outstanding leaders in higher education in the 20th century by the magazine Black Issues in Higher Education. His most recent recognition was receiving the 2019 Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics by the Mathematical Association of America. Dr. Treisman received a B.S. (summa cum laude) in mathematics from the University of California at Los Angeles. He received his Ph.D. at the University of California at Berkeley in 1985.

Breakout Sessions 1 *9:30 - 10:15*

Bulpitt — Who Moved My Math? Issues and Trends in Mathematics Education
- *Ted Coe, Achieve*

Hacienda — Café Sessions

Beginning Screencasts on a PC Tablet
- *James Sousa, Phoenix College*

Interactive Notebooks for your Classroom
- *Jennifer Carrillo, Phoenix College*
- *Diane Hirsch, Phoenix College*

Introduction to Microsoft OneNote
- *Leah Polanski, Phoenix College*

Open Educational Resources
- *Amy Lambert, Phoenix College*

Virtual Manipulatives for Mathematics
- *William Meacham, Scottsdale Community College*

F101 — Developing Statistical Literacy; What does it "Mean"?
- *Brian Beaudrie, Pima Community College*

F106 — Humor in the classroom, and in the classroom
- *J.W. Gaberdiel, Gateway Community College*

F201 — Commercial Presentation
- *Devlin Daley and Eric Daley, Derivita*

Breakout Sessions 2 *10:30 - 11:15*

F101 — Integrating Basic Math Skills with College Study Skills
- *Darla Aguilar, Pima Community College*
- *Jeff Theis, Pima Community College*

F106 — Affordable, Accessible, Adaptive: Knewton's alta - Commercial Presentation
- *Becky Moening, Michelle Greco, and Ryan Comeau, Knewton*

F110 — Mindset & Math: It Matters! (and it can be taught)
- *Marianne Auten, Paradise Valley Community College*

F201 — Data Centric Approach to Statistics
- *Kathryn Kozak, Coconino Community College*

F206 — Using Desmos to Teach and Learn the Normal Distribution
- *Matthew Michaelson, Glendale Community College*

Breakout Sessions 3 *1:45 - 2:30*

F106 Did you know your TI-84CE Plus could do this?
- *Kim Thomas, GUHSD Dual Enrollment Instructor*
- *Veronica Carlson, Adjunct and Dual Enrollment Instructor - Glendale Community College*

F201 A do-it-yourself approach to lightboard videos. Not as difficult as you would think....
- *Marcia Corby, Phoenix College*

F206 An Application Approach to the Introduction of Inverse Functions in a Precalculus Class: Age Disparity in Relationships
- *Matthew Michaelson, Glendale Community College*

Breakout Sessions 4 *2:45 -3:30*

F101 Trauma-Informed Math Instruction
- *Janelle Chisholm, No Teacher Left Behind Professional Development*

F106 Have your Students Walk the Line! Exploring Rate of Change using a Motion Detector
- *Veronica Carlson, Adjunct and Dual Enrollment Instructor - Glendale Community College*
- *Kim Thomas, GUHSD Dual Enrollment Instructor*

F206 I-Pad/tablets in the Classroom
- *Tim Bryan, Phoenix College*

Phoenix College - Main Campus Parking
1202 W. Thomas Rd
Phoenix, AZ 85013

Parking is free - park in unmarked spaces in west parking lot

ArizMATYC Spring 2019 Conference - Session Details

Keynote Address

From Scaling Pilots to Change at Scale: Next Steps in Developmental Education Reform
Uri Treisman, Executive Director, Charles A. Dana Center
Bulpitt Auditorium

My talk will explore lessons learned—both inspiring and troubling—from campuses and systems making fundamental changes in gateway mathematics courses. I'll describe the political, economic, and demographic pressures leading to these changes and their implications for faculty leaders. A special focus will be on equity and how new instructional and administrative practices might lead to new approaches to a perennial challenge.

Breakout Sessions 1 9:30 - 10:15

Who Moved My Math? Issues and Trends in Mathematics Education
Ted Coe, Achieve
Bulpitt Auditorium

What's happening in mathematics education around the country? In this session we will explore issues and trends in secondary and post-secondary environments by looking at shifts in both practice and content. With encouragement and caution, and a focus on meeting the needs of all students, we will examine opportunities as we consider where our profession may be headed over the next decade.

Developing Statistical Literacy; What does it "Mean"?
Brian Beaudrie, Pima Community College
Room F101

This short presentation goes beyond calculation and into the heart of some of the statistical understandings our students need as adults. Focus topics are: what is an "average", and how are they (mis)used; how (and why) graphs, charts and tables can be misleading; and the effect of advertising on us. Many classroom-ready examples will be used!

Humor in the classroom, and in the classroom
J.W. Gaberdiel, Gateway Community College
Room F106

Come enjoy humor in mathematics and nearly every field of education, and inspired to share your inner geek with your students in a way that is simultaneously humorous and serious. Especially in the field of mathematics, students with mathphobia can be put at ease with humor, and are more ready to connect with you and what they need to learn.

Derivita Commercial Presentation
Devlin Daley and Eric Daley, Derivita
Room F206

Our goal is to help more students finish college by completing their math courses. We help by making great tools for their teachers. We provide a formative assessment tool, a replacement for current math homework systems.

Breakout Sessions 1 - continued 9:30 - 10:15

Café Sessions – Hacienda Conference Room

Café Sessions are 15-minute burst sessions. Presentations are given concurrently to small groups at tables, with attendees visiting the presentations of their choice. Each session is repeated every 15 minutes.

Beginning Screencasts on a PC Tablet

James Sousa, Phoenix College

I will present on screencasting.

Interactive Notebooks for your Classroom

Jennifer Carrillo, Phoenix College

Diane Hirsch, Phoenix College

We will be showcasing the use of interactive notebooks, and have several of our interactive notebooks out for guests to see and answer any questions about how to get started and how to use them successfully to engage student learning in the class.

Introduction to Microsoft OneNote

Leah Polanski, Phoenix College

Microsoft OneNote is an intelligent notepad that can be used to keep different types of tasks and information organized, categorized and easily accessible. With OneNote, students can create digital notebooks that support the classroom. They can take written or typed notes, collaborate with classmates or the teacher, and turn in assignments to be graded. OneNote is free for Maricopa faculty and students.

Open Educational Resources

Amy Lambert, Phoenix College

Use of Open Educational Resources (OER) ensures that students have access, at the start of class, to the resources and materials they need to be successful. My presentation will focus on two of these resources. MOER is an open web-based mathematics assessment and course management platform. Its use is provided free to MCCCD students and instructors. This system is designed for mathematics, providing delivery of homework, quizzes, tests, practice tests, and diagnostics with rich mathematical content. Knewton Alta's Adaptive learning technology is at the heart of a personalized learning experience. Alta is low cost and will adapt to students' proficiency levels with each interaction.

Virtual Manipulatives for Mathematics

William Meacham, Scottsdale Community College

Virtual Manipulatives in Action: Drop by and take a look at the suite of software applets developed by Phoenix College and Scottsdale Community College for facilitating Math Education. From Base-10 blocks to Cuisenaire Rods and Fraction Circles, explore how these manipulatives are assisting students with the visualization of the fundamental concepts of mathematics. Plus, it is fun!!

Breakout Sessions 2 10:30 - 11:15

Integrating Basic Math Skills with College Study Skills

Darla Aguilar, Pima Community College

Jeff Theis, Pima Community College

Room F101

Pima Community College has been offering an integrated basic math skills and study skills course since Fall 2016. The curriculum has been reorganized to present the mathematics in a different manner and includes study skills, college knowledge and digital literacy. Come learn about the redesign of the curriculum and the lessons we have learned from offering this course.

Affordable, Accessible, Adaptive: Knewton's alta - Commercial Presentation

Becky Moening, Michelle Greco, and Ryan Comeau, Knewton

Room F106

Utilizing OER content and a sophisticated adaptive engine, Knewton's alta courseware provides a uniquely personal experience for learners, demonstrably effective for addressing the needs of students at all levels. It also creates unique opportunities for instructor-student engagement, and can be leveraged, alone or in conjunction with campus resources, to support students who struggle to meet learning objectives of curriculum courses.

Mindset & Math: It Matters! (and it can be taught)

Marianne Auten, Paradise Valley Community College

Room F110

Having a growth mindset is more important than initial ability in determining the progress made by students in their mathematical understanding. Family attitudes, cultural ideas, and frustrations lead many students to believe their math ability is a fixed trait like eye color. Math Faculty need to encourage a growth mindset with their students where they emphasize that the brain can grow and change. This workshop will provide math faculty with simple research-based strategies to influence a mindset that leads to grit, growth, and goal achievement.

Data Centric Approach to Statistics

Kathryn Kozak, Coconino Community College

Room F201

Around the nation, statistics is becoming the mathematics for many degrees. The goal of the grant StatPREP is to teach two-year college faculty how to infuse data centric methods into the statistics classroom. This presentation will demonstrate some of the material presented by the StatPREP leadership that can be used in a statistics class today. The presenter will share her experience in the classroom.

Using Desmos to Teach and Learn the Normal Distribution

Matthew Michaelson, Glendale Community College

Room F206

The normal distribution appears in the curriculum in several community college mathematics classes, for example, college mathematics, statistics, and business calculus. Because the normal distribution is an abstract concept that is difficult for many students to understanding, instructors need visual aids to supplement instruction and enhance learning. In this talk, the presenter demonstrates how Desmos can be used as an interactive tool that helps students to visualize the normal distribution.

Breakout Sessions 3 1:45 - 2:30

Did you know your TI-84CE Plus could do this?
Kim Thomas, GUHSD Dual Enrollment Instructor
Veronica Carlson, Adjunct and Dual Enrollment Instructor - Glendale Community College
Room F106

Technology is always changing and even though the TI-84CE looks similar to the classic with color, there are many hidden features to discover. Learn about the latest features of the TI-84 including piecewise graphing and see the teacher emulator software in action. Help student visualize mathematics with handheld technology.

A do-it-yourself approach to lightboard videos. Not as difficult as you would think....
Marcia Corby, Phoenix College
Room F201

Ever wondered how people write backwards on glass in a video medium? They don't! Have you ever been curious about how you could bring lightboard technology to your campus? Come see how a lightboard was built and learn how easy they are to use. This is your chance to dive in and experience the technology.

An Application Approach to the Introduction of Inverse Functions in a Precalculus Class: Age Disparity in Relationships
Matthew Michaelson, Glendale Community College
Room F206

Many topics in our mathematics classes can be contextualized to a topic that appeals to our students. The more appealing the topic, the more engaged our students will be. This presentation is a demonstration on how inverse functions can be introduced from the application of age disparity in romantic relationships. This demonstration will also provide an opportunity for participants to use Desmos to answer questions about finding a function's inverse.

Breakout Sessions 4 2:45 - 3:30

Trauma-Informed Math Instruction
Janelle Chisholm, No Teacher Left Behind Professional Development
Room F101

Our students come to school with all sorts of ACEs (adverse childhood experiences) that make learning math difficult. In this session we will explore strategies that help students feel safe in school, ready to learn, and willing to try.

Have your Students Walk the Line! Exploring Rate of Change using a Motion Detector
Veronica Carlson, Adjunct and Dual Enrollment Instructor - Glendale Community College
Kim Thomas, GUHSD Dual Enrollment Instructor
Room F106

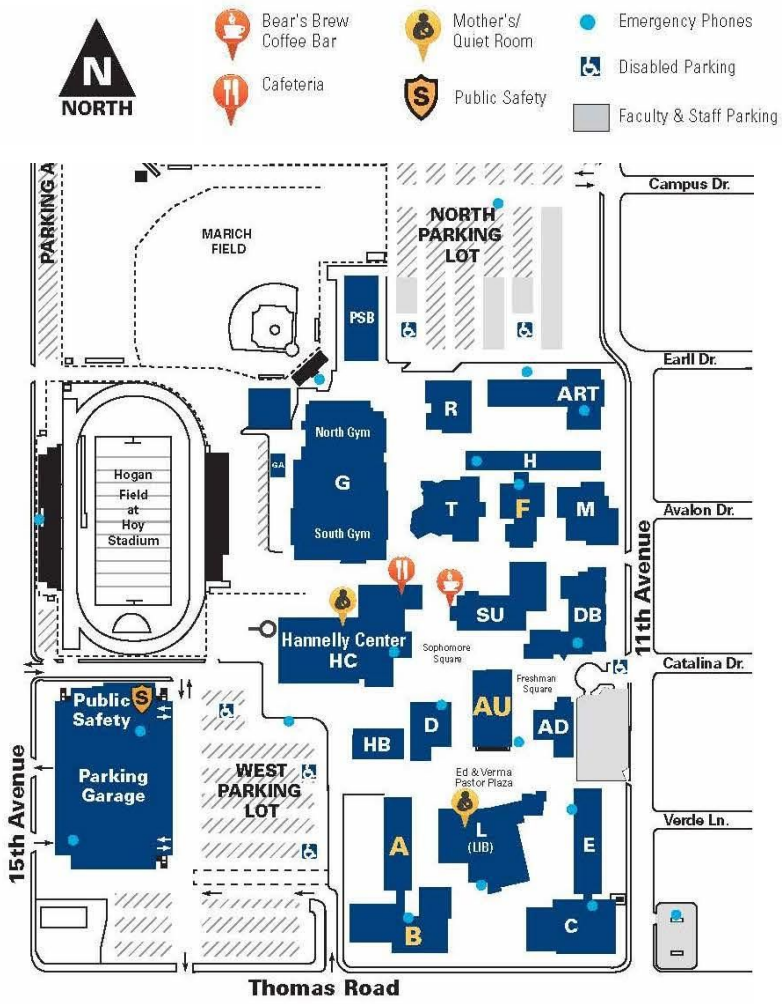
Learn how to engage your students and help them to better understand rate of change using a motion detector and TI-SmartView CE Software. This software emulates the TI-84 Plus family of graphing calculators making it an ideal demonstration tool for leading classroom instruction of math concepts. Participants will learn how to obtain a free copy of the software for yourself!

I-Pad/tablets in the Classroom
Tim Bryan, Phoenix College
Room F206

I will show how to connect and I-Pad to a computer, and talk about apps that can be used in the classroom and connecting with students using tablets.

Maps

Phoenix College - Main Campus Map
1202 W. Thomas Rd
Phoenix, AZ 85013



Map – F Building

1st floor

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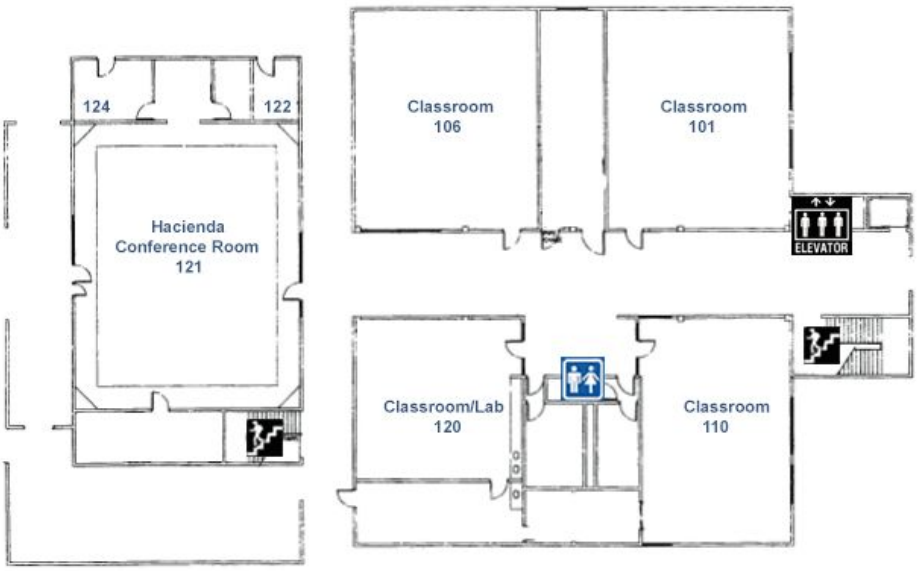

2nd floor

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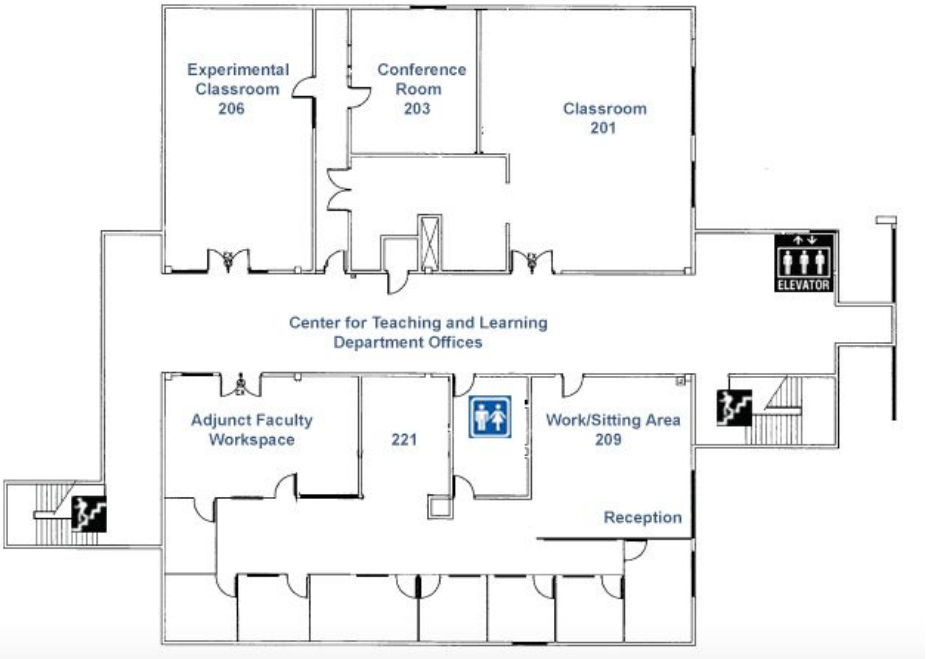
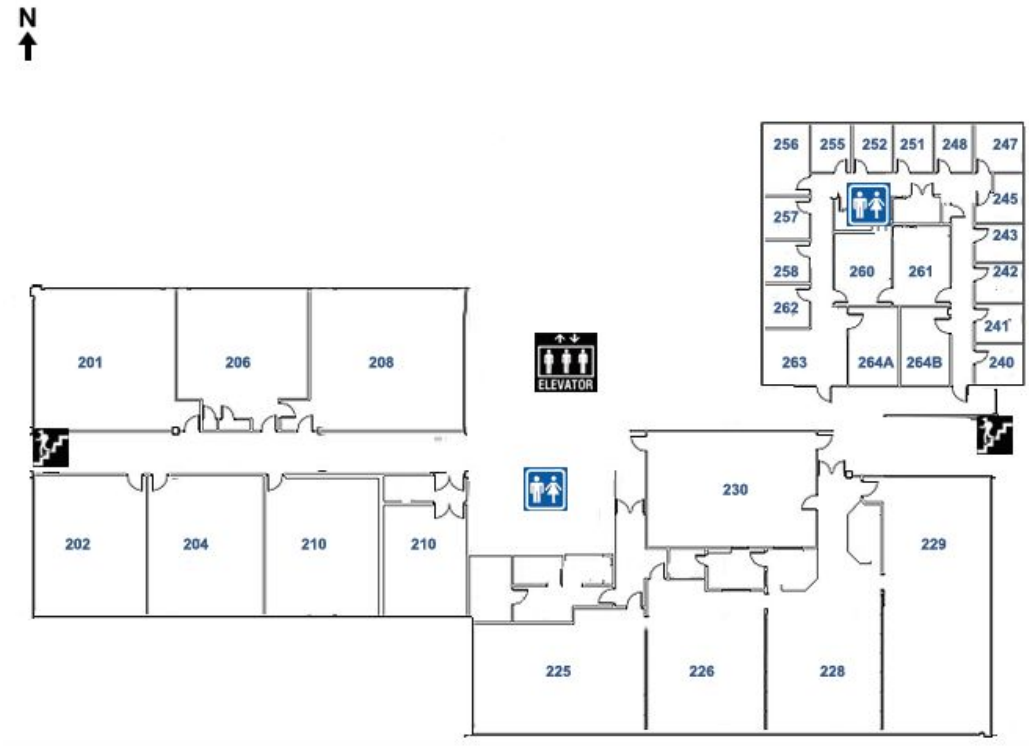
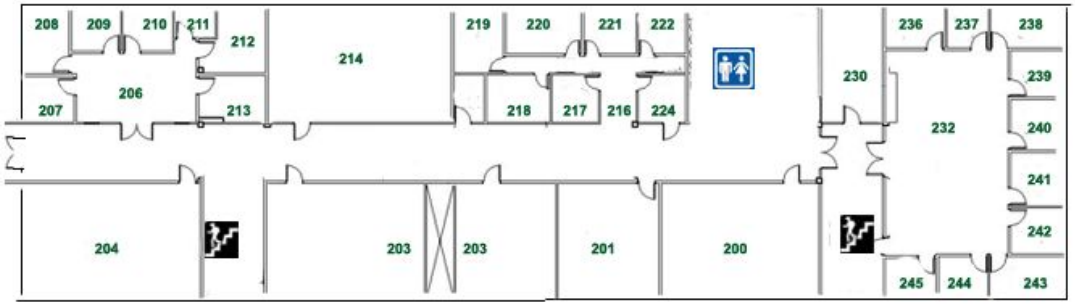


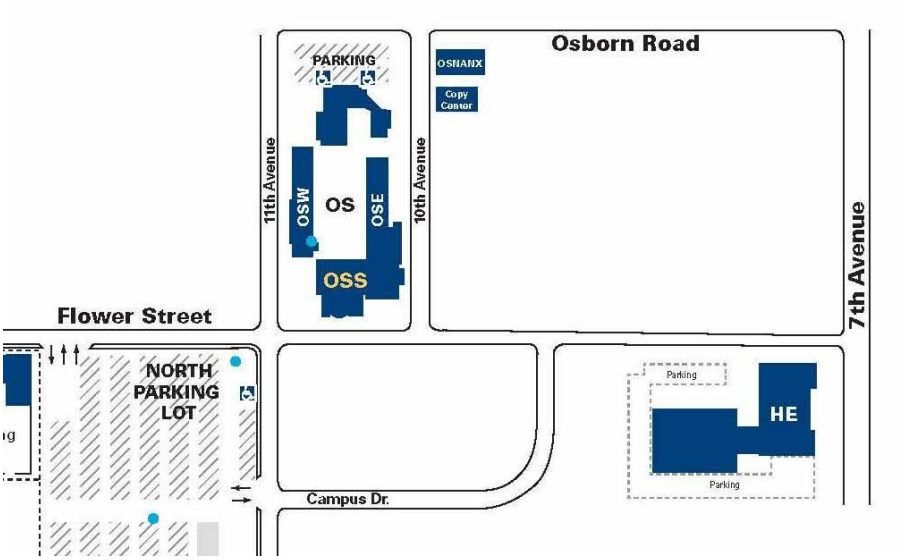
Map -B Building
2nd floor



Map -A Building
2nd floor



Phoenix College - Osborn Site Map
310 N 10th Ave
Phoenix, AZ 85013



OSS Building
1st floor

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