

Erinanne M. Saffell, PhD

Office Address

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School of Geographical Sciences and Urban Planning
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Education

- Doctor of Philosophy in Geography (Climatology)** December, 2004
Arizona State University
Tempe, AZ
“The Applicability of Synoptic Classifications: Analysis of an Urban Complex”
Chair: Andrew Ellis
- Master of Arts in Geography (Climatology)** August, 2001
Arizona State University
Tempe, AZ
“Urban-Rural Humidity Variations in Phoenix, Arizona”
Chair: Andrew Ellis (Climatology)
- Bachelor of Science** August, 1999
Arizona State University
Tempe, AZ
Major: Geography
Graduation Honors: Summa Cum Laude

Employment

- Senior Lecturer** 2009-present
School of Geographical Sciences and Urban Planning
Arizona State University
Director: Sharmistha Bagchi-Sen
- Instructional Professional** 2014-2019
School of Sustainability
Arizona State University
Director: Christopher Boone
- Residential Faculty – Geography** 2007-present
Maricopa County Community College District
Mesa Community College
Department Chair: Annalisa Alvrus
- Senior Hydrologist** 2006-2007
Flood Control District of Maricopa County
Flood Warning, Engineering Division
Phoenix, AZ
Manager: Steve Waters
- Faculty Associate** 2006-2007
Arizona State University
School of Geographical Sciences
Tempe, AZ
Acting Director: Tony Brazel
- Assistant Professor** 2004-2005
East Carolina University
Department of Geography
Greenville, NC
Department Chair: Ron Mitchelson

Appointments

Arizona State Climatologist

Director, Arizona State Climate Office
Arizona State University

July 2021-present
Tempe, AZ

Appointed by Governor Douglas Ducey

Service

2021-present	Co-Chair, ADWR State Drought Monitoring Technical Committee
2021	Member, SGSUP Instructor Hiring Committee
2020	Chair, SGSUP Instructional Design Hiring Committee
2020-present	Advisor, Sun Devil Weather and Climate Student Organization
2019-present	Member, AMS Board of Outreach and Informal Education
2019-2020	Member, AMS Local Chapter Affairs Committee
2018-2021	Member, SGSUP Fixed Term Personnel Committee
2015-2019	Executive Committee, AMS-NWA Central Arizona Chapter
2011-present	Director, SWIFT Weather Camp Steering Committee (<i>hiatus due to Covid-19</i>)
2011-12	Local Implementation Team Member, DataStreme ECS Project, AMS
2010-15	Secretary/Treasurer, AMS Central Arizona Chapter
2010-11	Coordinator, Summer Youth College, MCC, " <i>Stormchasing</i> "
2009-present	Member, MCCCDC Instructional Council Sustainability; Chair 2013-2018; 2020-2021
2008-present	Member, MCCCDC Instructional Council Geography
2007	Member, FCD Committee on Assessing Heat Warning Forecasts
2004-2005	Member, ECU Geography Curriculum Committee
2003	Supervisor, Student Service Learning Project, Mesa Community College
2002	Moderator, National Geography Bee, State of Arizona
2001-2002	Member, ASU Graduate Earth and Life Sciences Committee
2000-2001	Member, Graduate Student Advisory Board, Associated Students of ASU
2000-2001	Chair, Graduate Research Exposition Sub-Committee, ASASU
2001-2002	Host, SEE Arizona State University (elementary school outreach)
1999-2000	Judge, National Geography Bee, State of Arizona
1999-2000	Host, ASU International Earth Science Day

Student Mentoring

Thesis Director for Nicholas Acciaro, School of Earth and Space Exploration (2019-20)
Thesis title: Improving Sustainability Education in Arizona Public Schools

Thesis Committee for Henry Vasquez, School of Mathematical and Statistical Sciences (2017-18)
Thesis title: Regression Analysis on Colony Collapse Disorder in the United States

Courses Taught

Lower-division

- Extreme Weather and Climate
- Introduction to Climatology
- Introduction to Meteorology
- Introduction to Physical Geography
- Introduction to Human Geography
- Natural Hazards and Disasters
- Society and Environment
- Sustainability Professional Skills

- Sustainability Careers
- The Water Planet
- Weather and Climate
- World Regional Geography

Upper-division and graduate level

- Fortran Programming
- Geography of Natural Resources
- Global Climates
- Hydroclimatology
- Meteorological Instruments
- Thirteen Ways Nature Kills

Publications

Saffell, EM and King, M. 2015. Professional Skills in Sustainability. Poster: *Association for the Advancement of Sustainability in Higher Education*. AASHE Annual Conference and Exposition, Minneapolis, MN.

Saffell, EM. 2004. *The Applicability of Synoptic Classifications: Analysis of an Urban Complex*. Arizona State University Doctoral Dissertation. 118 pp.

Hawkins, TW, Brazel, AJ, Stefanov, WL, Bigler, W, and Saffell, EM. 2004. The role of rural variability in urban heat island determination for Phoenix, Arizona. *Journal of Applied Meteorology*, Volume 43:476-486.

Ellis, AW, Saffell, EM, and Hawkins, TW. 2004. A method for defining monsoon onset and demise in the southwestern United States. *International Journal of Climatology*. Volume 24:247-265.

Saffell, EM, Editor. 2003. *Introductory Physical Geography Laboratory Manual*. Hayden-McNeil Publishers, Plymouth, MI. 174 pp.

Saffell, EM and Ellis, AW. 2002. Urban-rural humidity variations in Phoenix, Arizona. *Journal of Arizona-Nevada Academy of Science*. Volume 34:53-64.

Saffell, EM, Editor. 2002. *Physical Geography Laboratory Manual*. Thomson Publications. Florence, KY. 134 pp.

Saffell, EM. 2001. *Urban-Rural Humidity Variations in Phoenix, Arizona*. Arizona State University Masters Thesis. 87 pp.

Professional Presentations

The Urban Heat Island of Phoenix, AZ under differing synoptic regimes. *101st Association of American Geographers Annual Meeting*, April, 2005. Denver, CO.

Urban-rural humidity variations in Phoenix, Arizona. *4th American Meteorological Society Symposium on the Urban Environment*, May, 2002. Norfolk, VA.

Spatio-temporal variations in humidity. *98th Association of American Geographers Annual Meeting*, February, 2001. Los Angeles, CA.

Spatial analysis of dewpoint trends. *97th Association of American Geographers Annual Meeting*, February, 2002. New York, NY.

The urban response to moisture. Arizona State University Research Symposium for Graduates in Earth, Life, and Social Sciences, February, 2000. Tempe, AZ.

Outreach Presentations

How much water will mother nature be supplying? *The Eighth Annual Comprehensive Conference on Tribal Water in the Southwest. Law Seminars, International*. May, 2021. Zoom.

Teaching the challenging concepts of physical geography. *Arizona Geographic Alliance Professional Development*. February, 2021. Zoom.

The physics of wind. *St. Timothy's Catholic School, 5th Grade Science*. October, 2019. Mesa, AZ.

Dangers of the Urban Heat Island. *Mountain View Elementary School, 7th Grade Science*. November, 2018. Phoenix, AZ.

Preparing for natural disasters. *Arizona Geographic Alliance Summer Geography Institute*, June, 2018, Tempe, AZ.

Natural disasters: Surviving the Waffle House Index. *Arizona Geographic Alliance GeoDay Trip*, February, 2017. Mesa, AZ.

Weather Ready Nation: Preparing for extreme flooding. *Science, Technology, Engineering, Math, and Social Studies Institute (Arizona Geographic Alliance STEMSS)*, June, 2016. Tempe, AZ.

Forecasting the storm: Basic meteorology tools. *AZ Monsoon Convention*, June, 2016. Chandler, AZ.

How can I teach about weather? *Science, Technology, Engineering, Math, and Social Studies Institute (Arizona Geographic Alliance STEMSS)*, July, 2013. Tempe, AZ.

Geoscience activities in the classroom. *Arizona Geographic Alliance GeoConference*, September, 2012. Scottsdale, AZ.

The science of climate change. *Explorations Educator Workshop, Arizona Science Center*, March, 2008. Phoenix, AZ.

Implications of the Urban Heat Island. *Arizona Chapter, American Society of Safety Engineers*, March, 2008. Phoenix, AZ.

The modernization and expansion of the Volunteer Observer Network: opportunity to incorporate public education and outreach. *North American Surface Water Quality Conference and Exposition*, August, 2007. Phoenix, AZ.

Understanding weather. *Explorations Educator Workshop, Arizona Science Center*, June, 2007. Phoenix, AZ.

Flood warning procedures and operations. *Maricopa County Risk Management Safety Fair*, January, 2007. Phoenix, AZ.

Funding

2016 Co-Principle Investigator. Phoenix Cubesat Mission (\$198,140)
2014 Faculty and Professional Growth, MCCCDC (Sabbatical)
2012 Faculty and Professional Growth, MCCCDC (\$1077)
2011 Faculty and Professional Growth, MCCCDC (\$1128)
2010 Faculty and Professional Growth, MCCCDC (\$1479)
2008 Faculty Educational Development Grant, Mesa Community College (\$7640)
2004 Gaswirth Award, Arizona State University (\$2430)
2002 Research and Travel Award, IGERT (\$1000)
2002 American Meteorological Society Travel Grant (\$700)
2001 Graduate College Travel Grant, Arizona State University (\$200)
2001 Associated Students of ASU Travel Award (\$350)

Professional Affiliations

American Association for the Advancement of Science (AAAS)
American Association of State Climatologists (AASC)
American Geophysical Union (AGU)
American Meteorological Society (AMS)
Central Arizona Local Chapter (AMS)
International Association for Urban Climate (IAUC)
National Weather Association (NWA)

Certificates

Effective Communication. FEMA IS-00242, Emergency Management Institute, U.S. Department of Homeland Security. 2007.

Leadership and Influence. FEMA IS-00240, Emergency Management Institute, U.S. Department of Homeland Security. 2007.

Building Partnerships in Tribal Communities. FEMA IS-00650, Emergency Management Institute, U.S. Department of Homeland Security. 2006.

Anticipating Hazardous Weather and Community Risk. FEMA IS-00271, Emergency Management Institute, U.S. Department of Homeland Security. 2006.

Community Hurricane Preparedness. FEMA IS-00324, Emergency Management Institute, U.S. Department of Homeland Security. 2006.