



## CONTACT

**Instructor of Geosciences**  
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## PROFESSIONAL AFFILIATIONS

ASU Sigma Gamma  
Epsilon for Geology  
2019-Present



American Meteorological  
Society San Diego  
Chapter  
2015-2018



# JESSICA A. GARZA

## EDUCATION

- 2023- Present **Angelo State University**  
*Doctorate of Education in Transformative Leadership Pending*  
San Angelo, Texas.
- Academic Scholarship: Distinguished Graduate
- 2008-2011 **University of Hawaii at Manoa**  
*Master of Science in Meteorology*  
Honolulu, Hawaii.
- Thesis Title: "Climatology and Changes of the North-East Trade Winds Over the Islands of Hawaii".
  - Academic Scholarship: Graduate Research Assistantship.
- 2004-2008 **University of the Incarnate Word**  
*Bachelor of Science in Meteorology,*  
*Minor in Mathematics*  
San Antonio, Texas.
- Thesis Title: "Cloud Seeding Effects and Processes"

## TEACHING EXPERIENCE

- 2019-Present Angelo State University, Instructor of Geosciences.  
Dept. of Physics and Geosciences, San Angelo, Texas  
Course Taught: GEOL 1303 Physical Geology, and  
GEOL 1103 Lab, GEOL 1347 Meteorology, PS 1317  
Physical Science II and Lab, PS 1315 Lab, GEOL  
1304 Historical Geology Lab, GEOL 3308 Physical  
Oceanography, GEOL 4391 Severe Storms and Field  
Observations. On Campus and Online Courses.
- 2018-Present Howard College, Instructor of Physical Geography  
Dept. of General Studies, San Angelo, Texas  
Courses Taught: GEOG 1301 Physical Geography.  
Online Course.
- 2012- Present MiraCosta College, Instructor of Earth Science  
Dept. of Physical Science, Oceanside, California  
Courses Taught: EART 106 Earth Science, OCEA 101  
Oceanography, GEO 101 Physical Geology. On  
Campus and Online. Online since 2018.
- 2018-2019 Angelo State University, Geoscience Adjunct  
Dept. of Physics and Geosciences, San Angelo, Texas  
Courses Taught: GEOL 1303 Physical Geology and  
GEOL 1103 Lab, GEOL 1347 Meteorology. On  
Campus and Online Courses.

## **TEACHING EXPERIENCE cont.**

- 2014-2016 Grossmont College, Instructor of Physical Geography  
Dept. of Earth Science, El Cajon, California
- 2013-2014 Palomar College, Instructor of Oceanography  
Dept. of Earth Space Science, San Marcos, California
- 2013-2016 St. Philip's College, Instructor of Meteorology, Oceanography, Earth Science  
Science and Mathematics Summer Academy, San Antonio, Texas
- 2014-2014 St. Philip's College, Instructor of Statistics  
Motivating and Engaging STEM Activities, San Antonio, Texas
- 2012-2013 Tutor Doctor, Contracted Tutor of Algebra, Chemistry, Physical Geography  
San Diego, California
- 2012-2012 California State University San Marcos, Instructor of Earth Science  
Dept. of Chemistry and Biochemistry, San Marcos, California
- 2012-2012 San Antonio College, Instructor of Calculus, Pre-Calculus  
Upward Bound Math and Science, San Antonio, Texas

## **FIELD WORK AND COMMUNITY**

- 2016-2017 Wildlife Tracker- San Diego Wildlife Tracking Team, Chaparral Naturalist- California  
Chaparral Institute
- 2015-2016 U.S. Forest Ranger- San Gorgonio Wilderness Association, Tide Pool Exhibitor- UC San  
Diego Birch Aquarium
- 2013-2016 American Red Cross Disaster Action Team 2013-2016 and training workshops:  
Psychological First Aid, Client Casework- Providing Emergency Assistance, Disaster  
Assessment Fundamentals, Mission Viejo Disaster Preparedness, San Clemente  
Readiness Festival
- 2005-2012 National Weather Service Fred Hall Boat Show, Mentor with the Big Brothers Big Sisters  
of San Diego County, American Meteorological Society Weather Fest, American Red  
Cross Volunteer for Hurricane Katrina Relief

## **PROFESSIONAL DEVELOPMENT**

- 2022 Texas Weather Conference Presentations, National Weather Service Skywarn Training,  
Equity-Minded Online Teaching Practices, ASU Core Values Professional Development  
Workshop, Geologic Society of America Conference
- 2021 Program for Online Teaching, MiraCosta College, Equity Minded Online Teaching  
Practices

## **PROFESSIONAL DEVELOPMENT cont.**

- 2019 ESCALA Certificate in College Teaching and Learning in HSIs
- 2019-2018 American Meteorological Society Conference, and Geologic Society of America Conference
- 2013-2014 STEM Events: Encuentros Education & Career Exploration STEM Conference, Barrios Empowerment Conference, Earth Day representative at Camp Pendleton, California Science Education Conference
- 2012 Best Practices in Learner-Centered Teaching: Active Learning Techniques for Use in Your Classroom, Palomar College and the North County Higher Education Alliance; U.S. Geological Survey and The Water Education Foundation: Project Water Education for Teachers workshop participant

## **PRESENTATIONS AND PUBLICATIONS**

- 2023- Present ASU Co-Director and Facilitator for Haliburton Earth and Space Science Teacher Workshop
- 2023-Present ESCALA STEM Mini Program Facilitator
- 2021- Present ASU Culturally Responsive Approaches to Serving Hispanic Students (CRASH) Values Program Diversity & Inclusion Session Facilitator and Commitment Session Facilitator
- 2022-2023 ESCALA's Culturally Responsive Facilitation in Hispanic Serving Institutions Program
- 2020 ESCALA Presentation: Comparing Changes in Exam Scores for Various Exam Methods
- 2012 Journal of Geophysical Research-Atmospheres Publication: "Changes of the Prevailing Trade Winds over the Islands of Hawaii and the North Pacific"
- 2011 Presentation: Meteorology, instrumentation, and career choices at St. Philip's College Center of Excellence Science and Math Summer Academy
- 2010 Featured on KITV 4 Honolulu Television, Top Weather Story: "Are Trade Winds Winding Down? Seminar Presentation: "Climatology and Changes of Northeast Trade Winds over the Islands of Hawaii" presented at Joint Meteorology and International Pacific Research Center Seminar
- 2008 Symposium Presentation "Cloud Seeding Effects and Processes": 9<sup>th</sup> Annual McNair Scholar Research Conference in College Park, Maryland, McNair symposium in San Antonio, Texas and McNair Scholar seminar in Denton, Texas
- 2008 McNair Scholars Research Journal, Volume VIII Publication: "Cloud Seeding Effects and Processes"
- 2004 San Antonio Express Newspaper Publication: "Littering An Epidemic That Must Be Treated", Metro Edition

## **INSTITUTIONAL SERVICE**

2021- Present	ASU Curriculum Building Team for Culturally Responsive Approaches to Serving Hispanic Students (CRASH) Values Program
2022-Present	ASU Coach for Culturally Responsive Approaches to Serving Hispanic Students (CRASH) Values Program
2022-2023	ASU Physics and Geoscience Departmental Committees: T&P Teaching Rubric, Recruiting and Retention
2018-2018	Courses and Programs/Curriculum Committee Member, MiraCosta College,
2018-2023	ASU Student Field Trips: San Angelo State Park, Big Bend, Fossil Hunting in Brownwood, San Angelo Area Geology Trips, Meteorology NWS/KSAN/FOX, Grand Canyon, Sedimentology in Palo Duro Canyon, Volcanology in New Mexico, Minerology Petrology in Hill Country, Oceanography in Mustang Island. ASU STEM Workshop, Santa Rita Science Night, Fort Concho Elementary Science Night, ASU Lab Night

## **GRANT AWARDS AND COURSE DEVELOPMENTS**

2019-Present	New Course Creations: GEOL 3308 Physical Oceanography, and GEOL 4391 Severe Storms and Field Observations. Recreation of Elective Course to Core Science Course: GEOL 1347 Meteorology. New Course Creation in Progress: GEOL 4XXX: Climatology and Biogeography of National Parks.
2023	ASU Undergraduate Mentor Grant: Undergraduate research mentor for research students in the advanced GEOL 4391 Meteorology Severe Storms and Field Observations research course
2021	ASU Faculty Learning Commons Mini-Grant Recipient for GEOL 1103 Physical Geology Lab. Title: "Reworking GEOL 1103-Physical Geology Laboratory Manual"
2020	ASU Faculty Learning Commons Mini-Grant Recipient for GEOL 3308 Oceanography. Title: "Development of GEOL 3308-Physical Oceanography"

## **OTHER AWARDS AND HONORS 2007-Present**

- Academic Scholarship, University of the Incarnate Word
- Dean's List and McNair Scholars Program, University of the Incarnate Word
- Outstanding Service and Achievement in Meteorology Award, University of the Incarnate Word
- Recognition at the Honors Convocation for the School of Math, Science, and Engineering, UIW
- Hispanic Scholar Fund Scholarship Recipient
- National Weather Service Fellowship, University of Hawaii at Manoa
- Angelo State University President's Award for Faculty Excellence 2023 Nominee
- Angelo State University Distinguished Graduate Scholarship