

Curriculum Vitae

MICHAEL J. KEABLES, PHD

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Contact Information

Department of Geography and the Environment
University of Denver
2050 E. Iliff Avenue
Denver, CO 80208
303-871-2653
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Administrative Positions

Chair, Department of Geography and the Environment, 2016-present
Senior Associate Dean, Ritchie School of Engineering and Computer Science, 2015-2016
Interim Dean, Ritchie School of Engineering and Computer Science, 2011-2015.
Associate Dean, Natural Sciences and Mathematics, 2008-2011.
Acting Dean, Natural Sciences and Mathematics, Summer 2009.
Acting Dean, Natural Sciences and Mathematics, Fall 2008-Spring 2009.
Chair, Department of Geography, 2005-2008.
Interim Dean, Natural Sciences and Mathematics, Summer 2007.
Interim Executive Director, Service Learning and Civic Engagement, 2003-2005 (included the Pioneer Leadership Program, Living and Learning Communities, Center for Service Learning, Center for Community Programs).
Director, Environmental Science Program, 1998-2005.
Director, Earth, Environmental, and Ecological Sciences, 1999-2004.
Associate Dean, Undergraduate Studies, 1995-1999.
Acting Department Chair, Fall 1996, Fall 1997, Fall 1998.

Faculty Appointments

Associate Professor with Tenure
Department of Geography and the Environment
University of Denver
Denver, CO 80208
July 1992 - present

Assistant Professor
Department of Geography
University of Denver
Denver, CO 80208
September 1986 - June 1992

Lecturer
Department of Geography
University of Maryland-Baltimore County
Catonsville, MD 21228
August 1985 - August 1986

Lecturer
Department of Geography
University of Wisconsin-Madison
Madison, WI 53706
August 1982 - August 1985

Education

Ph.D., Geography, University of Wisconsin-Madison, 1986
M.S., Geography, University of Wisconsin-Madison, 1982
B.A., Geography, University of Colorado-Boulder, 1978

Research Interests

Synoptic, dynamic, and applied climatology, hydrology, environmental problems, climatic variability, climate change. Current research project involves the use of local water budget models to predict soil water conditions in response to global climate change as predictors of future water supplies and drought.

Grants

Keables, Michael J. and Jones, Shannon L., 2021. Doctoral Dissertation Research: Flood hydrology in tropical coastal catchments: linking watershed dynamics to mangrove sedimentation. National Science Foundation, Doctoral Dissertation Research Improvement grant, \$24,935.

Keables, Michael J., 2011. GIS Services in Support of DRCOG Land Use and Sustainability Program, Denver Regional Council of Governments, \$44,905.

Keables, Michael J. and Giannetti, Claudia M., 2010. GIS Services in Support of DRCOG Land Use and Sustainability Program, Denver Regional Council of Governments, \$17,809.

Keables, Michael J. and Giannetti, Claudia M., 2010. GIS Services in Support of DRCOG: Task Order 3, Denver Regional Council of Governments, \$8,140.

Keables, Michael J., and Giannetti, Claudia M., 2009. GIS and Environmental Technical Assistance, City and County of Denver, \$28,993.

Keables, Michael J., 2008. Online Delivery of the Masters in Science in Geographic Information Science Degree. Center for Teaching and Learning, University of Denver, \$18,611.

Keables, Michael J. and Longbrake, William I., 2007. South Adams Water and Sanitation District GIS/GPS Internship, \$20,040.

Keables, Michael J. and Longbrake, William I., 2007. National Parks Service, Geologic Resources Division Internship, \$15,070.

Keables, Michael J. and Longbrake, William I., 2007. National Parks Service, Environmental Quality Division Internship, \$42,584.

Keables, Michael J. and Longbrake, William I., 2007. Colorado State Conservation Board Internship, \$6383.

Keables, Michael J., Calhoun, Jo, Grieve, Catherine, and York, Sheldon, 2005. Marsico Internship Initiative: Year 2. Marsico Foundation, \$230,041.

Keables, Michael J., Calhoun, Jo, and York, Sheldon, 2005. Field Experience Program: Year 3. Marsico Foundation, \$95,305.

Keables, Michael J., Calhoun, Jo, Greive, Catherine, Haag, John, Hawkins, Mary Michael, Stott, Annette, and York, Sheldon, 2004. Marsico Internship Initiative: Pilot. Marsico Foundation, \$177,143.

Keables, Michael J., Calhoun, Jo, and York, Sheldon, 2004. Field Experience Program: Year 2. Marsico Foundation, \$122,650.

Keables, Michael J., Calhoun, Jo, and York, Sheldon, 2003. Field Experience Program: Pilot. Marsico Foundation, \$35,000.

Keables, Michael J. and Luchsinger, Deborah, 1999. "Application of real-time meteorological data in undergraduate meteorology courses." National Science Foundation, Instrumentation and Laboratory Improvement, \$6000.

Keables, Michael J., 1994. "Climatology Library Access to the Internet." University of Denver Faculty Research Grant, \$1000.

Keables, Michael J., 1992. "Application of real-time meteorological data in undergraduate meteorology courses." National Science Foundation, Instrumentation and Laboratory Improvement, \$11,392.

Keables, Michael J., 1990. "Spatial patterns of hydroclimatic variability in the Mississippi River Basin." Water Resources Research Act, U.S. Geological Survey, \$173,556.

Keables, Michael J. and Sullivan, Donald G., 1987. "Acquisition of thematic mapper imagery of Western Turkey." Marlar Foundation, \$2250.

Publications

Keables, Michael J., 2020 (ed.). *The Rocky Mountain West: A Compendium of Geographic Perspectives*, American Association of Geographers, ISBN 978-0-89291-286-5.

Keables, Michael J. and Mehta, Shitij, 2010. A soil water climatology for Kansas. *Great Plains Research* **20**: 229-248. (Charles E. Bessey award for best natural sciences article published in *Great Plains Research* in 2010.)

Hartley, Suzanne, and Keables, Michael J., 1998. Synoptic associations of winter climate and snowfall variability in New England, USA, 1950-1992. *International Journal of Climatology* **18**:281-298.

Keables, Michael J., 1992. Spatial variability of midtropospheric circulation patterns and associated surface climate during ENSO winters. *Physical Geography* **13**:331-348.

Keables, Michael J., 1991. Hydroclimatic variability on the Great Plains. *Great Plains Research* **1**:77-92.

Keables, Michael J., 1989. A synoptic climatology of the bimodal warm season precipitation profile of the Upper Midwest. *Journal of Climate* **2**:1289-1297.

Keables, Michael J., 1988. Spatial associations of midtropospheric circulation and Upper Mississippi River Basin hydrology. *Annals Assoc. Amer. Geog.* **78**:74-92.

Technical Reports

Keables, Michael J., 1993. Spatial patterns of hydroclimatic variability in the Mississippi River Basin. Final Report, U.S. Geological Survey, 119pp.

Papers

Keables, Michael J., 2011. "Exemplary Course: NATS 1201 Environmental Systems-Atmosphere." Blackboard World Conference, July 2011, Las Vegas, Nevada (invited).

Keables, Michael J., 2010. "From lecture hall to virtual classroom: Lessons learned in converting a traditional on-campus course to a distance learning environment." Blackboard World Conference, July 2010, Orlando, Florida (invited).

Keables, Michael J., 2010. "Hydroclimatic variability on the Great Plains." American Association of Geographers, April 2010, Washington, D.C.

Keables, Michael J., 2010. "NATS 1201: Environmental Systems Online." Distance Learning Showcase. University of Denver Symposium on Distance Learning, January 2010, Denver, Colorado (invited).

Keables, Michael J., 2008. "Relationships between soil water climatology of the Central Great Plains and the Atlantic Multidecadal Oscillation." American Association of Geographers, April 2008, Boston, Massachusetts.

Keables, Michael J. and Mehta, Shitij, 2007. "Climatic variability of soil water balance parameters." American Association of Geographers, April 2007, San Francisco, California

Keables, Michael J., 2006. "Experiential learning in the Geography Curriculum." American Association of Geographers, March 2006, Chicago, Illinois

Keables, Michael J., "A soil water budget climatology for Kansas using GIS." American Association of Geographers, March 2005, Philadelphia, Pennsylvania.

Noonan, Jessica, Keables, Michael J., and Sutton, Paul C., 2004. "An urban landuse study of population growth and urban sprawl in the Denver-metro area using Landsat TM imagery." American Society for Photogrammetry and Remote Sensing, May 2004, Denver, Colorado.

Stewart, Joanne E., Sullivan, Donald G., Keables, Michael J., and Berry, Joseph K., "Factors influencing the spatial patterns of bats along riparian corridors in a prairie landscape." American Association of Geographers, March 2004, Philadelphia, Pennsylvania.

Keables, Michael J., "Synoptic climatological research at the University of Denver." Department of Civil Engineering, University of Colima, December 2001, Colima, Mexico (Invited).

Keables, Michael J., "Synoptic climatological research at the University of Denver." Department of Geography, University of Guadalajara, December 2001, Guadalajara, Mexico (Invited).

Keables, Michael J. and Wedgeworth, Connie S., "Spatial associations of midtropospheric circulation patterns and anomalous hydrologic conditions for the contiguous United States." American Association of Geographers, February 2001, New York City, New York.

Keables, Michael J., "ENSO circulation and its effects on the weather of the United States." Physics Department Colloquium, University of Denver, December 1992 (Invited).

Keables, Michael J., "Winter climate anomalies in the United States associated with ENSO circulation." American Association of Geographers, April 1992, San Diego, California.

Sullivan, Donald G., Keables, Michael J., and Cec, Patricia A., "Precipitation variability on the Palmer Divide, Front Range, Colorado." Rocky Mountain Hydrological Research Center, August 1991, Allenspark, Colorado.

Van Hyning, Conrad N. and Keables, Michael J., "Synoptic climatology of winter ENSO-related precipitation in California." American Association of Geographers, April 1991, Miami, Florida.

Keables, Michael J., "Spatial patterns of hydroclimatology on the Great Plains." Water Resources Engineering Symposium, Colorado State University, September 1990, Ft. Collins, Colorado (Invited).

Keables, Michael J., "Spatial and temporal patterns of Great Plains hydroclimatology." American Association of Geographers, April 1990, Toronto, Ontario, Canada.

Keables, Michael J., "Hydroclimatic variability on the Great Plains." 14th Annual Symposium of the Center for Great Plains Studies, April 1990, Lincoln, Nebraska (Invited).

Keables, Michael J., "Circulation-streamflow associations on the Great Plains." Front Range American Geophysical Union meeting, February 1990, Boulder, Colorado.

Keables, Michael J., "Synoptic climatology of the bimodal precipitation distribution in the Upper Midwest." American Association of Geographers, April 1989, Baltimore, Maryland.

Keables, Michael J., "Spatial associations of midtropospheric circulation and Upper Mississippi River Basin hydrology." American Association of Geographers, April 1987, Portland, Oregon.

Keables, Michael J., "Spatial associations of midtropospheric circulation and winter precipitation in the Upper Mississippi River Basin." American Association of Geographers, May 1986, Minneapolis, Minnesota.

Keables, Michael J., "A synoptic climatology of the bimodal warm season precipitation distribution in the Upper Midwest: Preliminary results." American Association of Geographers, April 1984, Washington, D.C.

Keables, Michael J., "Dominant 700 millibar anomaly patterns over North America, 1949-1974." American Association of Geographers, April 1982, San Antonio, Texas.

Honors

University of Denver “You Rock” Award, 2022
Pioneer Award Nominee, 2018
Leadership Award, Ritchie School of Engineering and Computer Science, 2012
Blackboard Catalyst Award for Exemplary Courses, 2011. National recognition for exemplary design of online course: NATS 1201: Environmental Systems – Weather.
Outstanding Faculty Award, Department of Geography, University of Denver, 2006.
Who’s Who Among America’s Teachers, 2004-present
Who’s Who in Science Higher Education, 2003-present
Outstanding Faculty Award, Department of Geography, University of Denver, 2002.
Outstanding Support Award, Office of Admission, University of Denver, 2001.
Exceptional Service Award, Department of Geography, University of Denver, 1999.
Who’s Who International, 1999-present
Outstanding Faculty Award, AUSA Student Senate, University of Denver, 1998.
Who’s Who, 1997-present
“Top Professor” Award, Mortar Board, University of Denver, 1997.
Faculty Award for Excellence, Division of Natural Sciences, Mathematics, and Engineering, 1995.
Who’s Who in the American West, 1995-present
Outstanding Faculty Award, Department of Geography, University of Denver, 1991.
Distinguished Teaching Achievement Award, National Council for Geographic Education, 1990.
Exceptional Service Award, Natural Sciences Division, University of Denver, 1988.
Outstanding Faculty Award, Department of Geography, University of Denver, 1988.

Teaching

Courses Taught:

FSEM 1111: Controversial Environmental Issues (First Year Seminar)
GEOG 0010: The Atmosphere
GEOG 0030: Natural Regions of the United States
GEOG 1201: Environmental Systems: Weather & Climate
GEOG 2020: Computer Cartography
GEOG 2200: World Regional Climatology
GEOG 2240: Photointerpretation
GEOG 2990: Professional Development for Environmental Science and Geography Majors
GEOG 3600: Meteorology
GEOG 3610: Climatology
GEOG 3620: Applied Climatology
GEOG 3240: Remote Sensing
GEOG 3740: Darkroom Cartography
GEOG 3900: Climatology Seminar
GEOG 3940: Advanced Remote Sensing
GEOG 3850: Physical Geography: Canyonlands
GEOG 3980: Geographic Internship
GEOG 4850: Topics in Physical Geography
GEOG 4950: Advanced Field Research
GEOG 4960: Thesis Identification
GEOG 4991: Independent Study
GEOG 4993: Technical Project
GEOG 4995: Independent Research

NATS 1201: Environmental Systems: The Atmosphere
NATS 1202: Environmental Systems: Hydrology
NATS 1203: Environmental Systems: Landforms
NATS 1216: Our Dynamic Earth: Atmospheric Hazards
FREX 1000: Freshman Experience
UDCC 1000: DU Campus Connection (first year student seminar)
UDCC 1050: Controversial Environmental Issues (First Year Seminar)
CIS 3502: Remote Sensing and GIS

Graduate Students:

Doctoral Students:

Jones, Shannon L. (expected 2023). "Flood hydrology in tropical coastal catchments: Linking watershed dynamics to mangrove sedimentation."

Narey, Martha A. (1999). "Drought Variability in the Western Great Plains: Synoptic Associations of Environmental Drought."

Luchsinger, Deborah A (1998). "Snowfall variability in the Rocky Mountains."

Hartley, Suzanne (1996). "Exceptional Snowfall Seasons in New England."

Masters Students:

Boyd, Rebecca (M.S. 2015). "A comparison of historical and predicted future runoff in the Upper Mississippi River Basin."

Enzi, Pascha (M.S. 2010). "Impact of pine beetle infestation on snow hydrology in the Colorado Front Range."

Walsh, Benjamin (M.A. 2007). "Modeling forest fire behavior using Landsat ETM+ imagery in the Colorado Front Range."

Dohnalova, Magdalena (M.S. 2004). "Measurement of evapotranspiration from satellite imagery."

Wedgeworth, Connie S. (M.A. 2001). "Midtropospheric circulation patterns and the spatial variability of water balance parameters in the contiguous United States."

Stillwell, Lana (M.A.1996). "A comparison of simulated and observed climate with model predicted vegetation patterns for 6000 years BP."

Dover, Melissa (M.A. 1995). "Development of a Geographic Information System for the Mt. Evans Research Area."

Groves, Sally (M.A. 1994). "Agricultural-to-Urban water transfers and economic and population changes since 1971 in the Lower Arkansas River Valley, Colorado."

Rodrigo, Mark (M.A. 1994). "Land cover classification of remotely sensed imagery and conversion to a vector based GIS for the Denver metropolitan area."

Torikai, Lori A. (M.A. 1994). "Climatic factors influencing forest fire frequency in Pike National Forest, Colorado."

Morris, B. Quinn. (M.A. 1993). "Evidence of climate change on the Palmer Divide, Colorado from tree-ring chronologies."

Rodeck, Paul P. (M.A. 1992). "Development of a Geographic Information System for Woodland Park, Colorado."

Wright, Patrick J. (M.A. 1991). "Colorado Atlas Project."

Van Hyning, Conrad N. (M.A. 1990). "A synoptic analysis of winter precipitation in California during ENSO events from 1950 to 1984."

Service

University:

Search Committee, University Ombuds, 2023
Faculty Review Committee, (chair), 2021-present
Chair Advisory Board, Office of the Provost, 2019-present
Faculty Review Committee, 2019-2021
Search Committee, Vice Provost for Internationalization, 2019
Courseware Faculty Advisory Board, Office of Teaching and Learning, 2018-present
Faculty Senate, Senator At Large, 2018-present
Personnel Committee, Faculty Senate, 2018-present
DU Impact 2025, Sustainability Cluster, 2016-present (co-chair)
DU 2025 Strategic Plan Implementation Group: Sustainability, 2016 (chair)
Search Committee, Vice Chancellor and Chief Information Officer, 2016 (chair)
DU 2025 Strategic Initiatives; Transformative Directions: Sustainability, 2015
Search Committee, Senior Associate Dean, Ritchie School of Engineering and Computer Science, 2016 (chair)
Search Committee, Dean, Ritchie School of Engineering and Computer Science, 2013-2015 (chair).
Search Committee, Associate Provost for Internationalization, 2013 (chair)
Renew DU Steering Committee, 2011-2015
Center on Aging Strategic Planning Committee, 2010-2011 (chair)
Search Committee, Vice Chancellor for Information Technology, 2010-2011 (chair)
Search Committee, Director, Academic Advising and Orientation, 2010
Distance Learning Council, 2009-present
Academic Assessment Advisory Committee, 2010-2012
Academic Quality, University NCAA Self-Study Committee, 2009-2012
University Calendar Committee, 2008-2016
University Accreditation Committee, 2008-2010 (co-chair, Scholarship and Research)
University Sustainability Council, 2008-2010 (chair, Curriculum and Research)
Graduate and Professional Student Learning Outcomes Committee, 2008-2009
Search Committee, Dean, Morgridge College of Education, 2008-2009
General Education Review Committee, 2007-2013
Sustainability Strategy Committee (co-chair), 2007-2008
Honors Program Review Committee, 2006-2007
Courseware Faculty Advisory Board, Center for Teaching and Learning, 2004-2012

Marsico Steering Committee, 2002-2007 (chair 2006-2007)
 Service Learning Faculty Committee (co-chair), 2003-2005
 Residential Living Task Force, 2003-2004
 Search Committee, Associate Vice Provost for Campus Life, 2002
 Core Construction Committee, 1999-2001
 Core Curriculum Committee, 1994-1996
 Graduate Student Exams (Outside Chair) for the Departments of History, Mass Communications, and Media, Film and Journalism Studies, Electrical Engineering, 1992-present
 Director of University Ceremonies, 1991-1999
 Commencement Marshal, 1987-present
 Commencement Co-Chief Marshal, 2011-present
 Exceptions to Academic Policy Committee (chair), 1988-1999; 2008-2011
 Academic Standards Committee, 1992-1999; 2008-2011
 Mentoring Committee, 1995-1996, 1997-1998
 Honors Committee, 1995-1996
 Search Committee, Dean of Natural Sciences, Mathematics and Engineering, 1995
 Endowed Lecture Series Committee, 1995
 University Task Force on Diversity and University Culture, 1992
 Ad-Hoc Committee, Atmospheric Science Center, 1986-1990

College:

Graduate Student Exams (Outside Chair) for the Departments of Biological Sciences, Chemistry and Biochemistry, Physics and Astronomy, 1992-present.
 Natural Sciences Foundations Curriculum Committee, 2002-2010
 Environmental Science Faculty Board, Chair, 1999-2003
 Promotion and Tenure Committee, 1997-2003
 Technology Committee, 1996-1999
 Environmental Science Committee, Chair, 1996-1999
 Core Curriculum Review Committee, 1994-present
 High School Mini-Course: Remote Sensing and GIS, 1994-1996
 Course Coordinator, Environmental Systems, 1992-present

Department:

Faculty Senate, 2005-2007
 Tenure and Promotion Committee, 1992 (chair), 1993-1995, 1997, 2002 (chair), 2007, 2009, 2011, 2013
 Planning Committee, 1987-2010
 Hiring Committee, 1987, 1990, 1995 (chair), 1996-1997, 2001-2002 (chair), 2003, 2005-2007, 2014, 2016, 2017
 Graduate Studies Director, 1987-1995

Graduate Student Examination Committees:

Ph.D.

Pons Ganddini, Diego, 2016
 Beck, Francine, 2006
 Davidson, Marilyn, 1992
 Wasserman, Adrian, 1988

M.A.

Hancock, Chris, 2020
Trivino, Natalie, 2018
Thunen, Diana, 2013
Marzetta, Katrina, 2011
Stewart, Joanne, 2007
Ernenwein, Eileen, 2002
Hunt, Emily, 2002
Blossom, Jeffrey, 2001
Drummond, Mark, 1999
Holtkamp, Christopher, 1999
Hyer, Lewis, 1996
Capesius, Joseph, 1996
Giannetti, Claudia, 1992
Watson, Linda, 1992
Isenhardt, James, 1991

M.S.

Noonan, Jessica, 2003

Professional

Regional Chair, Great Plains/Rocky Mountain Division, American Association of Geographers, 2021-2022.
Vice Chair, Great Plains/Rocky Mountain Division, American Association of Geographers, 2020-2021
Webmaster, Climate Specialty Group, American Association of Geographers, 2007-2020.
Local Arrangements Committee, American Association of Geographers, 2019-2020.
Regional Chair, Great Plains/Rocky Mountain Division, American Association of Geographers, 2006-2007.
Vice Chair, Great Plains/Rocky Mountain Division, American Association of Geographers, 2005-2006.
Treasurer, DU chapter, Sigma Xi, 1991-1998.
Honors Committee, Climate Specialty Group, AAG, 1988-1990.
Manuscript reviews for *Bulletin American Meteorological Society*, *Physical Geography*, *Professional Geographer*, *Climate Dynamics*, *Journal of Climate*.
Proposal reviews for the National Science Foundation, Sea Grant Program.
Textbook reviews: Merrill Publishing, W.C. Brown Publishing, West Publishing, John Wiley and Sons Publishing.

Community

Open Space Advisory Board, City of Centennial, 2007-2008.
Consultant, Denver Museum of Nature and Science, 1989-2010.
Consultant, Denver Art Museum, 1989-2010
Math and Science Teachers Hotline, 1988-2010.
Kids as Global Scientists, 1995-2010.
Elementary School Outreach: Asbury Elementary School, 1992-2003.
Panel of Experts, Colorado State Auditor's Office, Automobile Inspection and Repair (AIR) Program (auto emissions), 1990-1992.
High School Outreach: Ponderosa High School, 1991-1992.

Memberships

American Association for the Advancement of Science
American Association of Geographers
American Geographical Society
American Geophysical Union
American Meteorological Society
American Society for Engineering Education
Colorado Geographic Alliance
National Council for Geographic Education
National Geographic Society
Sigma Xi Scientific Research Society
Smithsonian Institution