

Nigel Davies

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<http://www.ewu.edu/CSHE/Programs/Geology/Geology-Faculty/Nigel-Davies.xml>

EDUCATION

Western Washington University, Bellingham, WA Masters of Science '11

Thesis: The Holocene glacial chronology of the Green River Lakes Drainage, Wind River Range, Wyoming

Washington University in St. Louis, St. Louis, MO Bachelor of Arts '03

Capstone: Compiling a Mars Analog Spectroscopy Calibration Suite using Hawaiian Basalts from the Kau Desert
The Hewlett Program in Environmental Sustainability

RESEARCH INTERESTS

- Glacial Geomorphology
- Quaternary Landscape Evolution
- Holocene Climate Change
- Paleo-glacial Reconstruction
- Lake Coring and Radiocarbon Dating
- Geologic Mapping Using GIS and other Remote Sensing Techniques
- Practical Geologic Laboratory and Field Skills

CLASSES TAUGHT

GEOL 100 Discovering Geology (5) - This course explores the interactions between human beings and their geological environment. The earth is a dynamic planet affected by sudden, violent events such as volcanic eruptions, earthquakes, and floods, as well as by slower processes operating over long time spans that create, move, and destroy continents and oceans. Other topics include study of energy, mineral, and water resources and their importance to modern society. Topics are presented at a level intended for non-science majors. This course satisfies lab science requirement at most universities. [Satisfies the GEQR for Natural Sciences, Geology]

GEOL 490 Senior Capstone: Geology Field Camp (10) - A four-week geology field camp for 10 quarter credits (6 semester credits) in southwestern Montana. Geology field camp is a capstone course for an undergraduate degree in geology and a prerequisite for most graduate programs in geology. Students describe rock units and make geologic maps in a rugged landscape dominated by the Tobacco Root, Pioneer, and Beaverhead Mountains. Field instruction includes detailed description of rock units, GPS skills, and geologic mapping using topographic maps and air photos. Students undertake a variety of group and individual exercises.

STUDENT OVERSIGHT

GEOL 100 Discovering Geology Lab

I manage a group of 12-15 teaching assistants who serve to instruct and teach students in the Geology 100 Labs. As we teach 5-6 sections of Geology 100 every quarter our lab is open for ~25 hrs/week. I organize weekly meetings, screen resumes for new TA's, set schedules, inform TA's about grading protocols to ensure that students receive quality instruction.

TECHNICAL OVERSIGHT

- Thin Section preparation
- Field and Laboratory Equipment Manager
- Hazardous Material Accumulation Manager
- Map Library Curator

CAMPUS SERVICE

- EWU Bike Club advisor
- Pomona College Sigma Tau advisor
- Pomona College Ski and Snowboard club advisor

GEOSCIENCE COMMUNITY OUTREACH

I have taught earth science outreach programs to K-12 students on topics ranging from Mars exploration, to coastal hydrology, to 3D earthquake and tsunami visualization, to rock and mineral identification. Dates and groups include:

Boy Scouts of St Louis County, St Louis, MO	March 2004
Webster Groves High School, St Louis, MO;	April 2004
Sycamore Elementary School, Claremont CA	March 2006
Boy Scouts of Whatcom County, Bellingham WA	June 2008
Homeschoolers on Whidbey, Bellingham WA	October 2008 + April 2009
Girl Scouts of Whatcom County, Bellingham WA	September 2009

PREVIOUS WORK EXPERIENCE

Washington State Department of Natural Resources -Natural Science Technician	2010
USGS EDMAP via WWU Geology - Mapping Assistant	2008-2009
Western Washington University – Teaching Assistant (Geology)	2007-2009
Pomona College - Geology Department Technician	2004-2007
Washington University (StL) - Earth & Planetary Science Remote Sensing Laboratory -Mission Analyst	2003-2004

Publication

Polenz, Michael; Miller, B. A. ; **Davies, Nigel** ; Perry, B. B. ; Clark, K. P. ; Walsh, T. J. ; Carson, R. J.; Hughes, J. F. 2011. Geologic map of the Hoodspout 7.5-minute quadrangle, Mason County, Washington, Washington Division of Geology and Earth Resources Open File Report 2011-3, 1 plate, scale 1:24,000

Polenz, Michael; Miller, B. A. ; **Davies, Nigel** ; Perry, B. B. ; Clark, K. P. ; Walsh, T. J. ; Carson, R. J.; Hughes, J. F.; Tepper, J.H. 2011. Analytical data from the Hoodspout 7.5-minute quadrangle, Mason County, Washington—Supplement to Open File Report 2011-3, Washington Division of Geology and Earth Resources Open File Report 2011-4

ABSTRACTS

Davies, Nigel and Clark, Douglas H. 2010. Late Holocene Fluctuations of the Mammoth Glacier, Wind River Range, Wyoming. Geological Society of America Cordilleran Section, Spring Meeting 2010, abstract #28-3

Davies, Nigel and Clark, Douglas H. 2009. A Little Ice Age Outburst Flood at Mammoth Glacier, Wind River Range, Wyoming. Geological Society of America *Abstracts with Programs*, Vol. 41, No. 7, p. 638

Jolliff, B. L.; Arvidson, R. E.; Doty, A. M.; **Davies, N.**; de St. Maurice, A.; Griggs, L. E.; Gross, M. E.; Ishida, C. C.; Izsak, G. M.; Deal, K. S.; Snider, N. O. 2002. Simulated Mars Rover Mission to Hydrothermal Vents, Ka'u Desert, Hawai'i. American Geophysical Union, Fall Meeting 2002, abstract #P61D-08

PROFESSIONAL ORGANIZATIONS

Geological Society of America	2002-present
American Geophysical Union	2007-present
The American Quaternary Association	2009-present

Grants

Geological Society of America Cordilleran Travel Grant (\$650)	2010
USGS EDMAP Grant co PI w/Dr. Douglas Clark (\$13,283)	2008-2009
Tobacco Root Geologic Society Field Research Grant (\$500)	2008
Geological Society of America Research Grant (\$1,860)	2008
Wyoming Geological Association Grant (\$700)	2008
WWU Department of Geology Field Research Grant (\$500)	2008