

# Robert Nicholas

Department of Atmospheric Sciences, University of Washington, Box 351640, Seattle, WA 98195-1640  
phone: (206) 853-8524 ♦ email: [rnicholas@atmos.washington.edu](mailto:rnicholas@atmos.washington.edu) ♦ fax: (206) 543-0308

---

## EDUCATION

### **University of Washington, Seattle WA** (current)

Ph.D. candidate in Atmospheric Science, supervised by Dr. David S. Battisti.

Using observational analyses, GCMs, and empirical downscaling models, my work focuses on the impacts of large-scale climate variability and change on regional precipitation and drought with particular application to seasonal and longer-range forecasting for agriculture and hydrology.

Participant in UW's interdisciplinary Program on Climate Change.

### **Colgate University, Hamilton NY**

Master of Arts in Teaching (Natural Science), Degree with Distinction, May 1996

thesis: *Teaching modern physics as history and narrative: science and critical pedagogy*

### **Bucknell University, Lewisburg PA**

Bachelor of Science in Physics, W. Norwood Lowry Prize in Physics, May 1994

## PUBLICATION

R.E. Nicholas and D.S. Battisti, 2008: Drought Recurrence and Seasonal Rainfall Prediction in the Río Yaqui Basin, Mexico. *Journal of Applied Meteorology and Climatology*, **47**(4), pp. 991-1005.

## COLLEGIATE TEACHING EXPERIENCE

### **Graduate Teaching Assistant, University of Washington**

- Honors Seminar on Global Warming (Winter 2009): responsible for creation and grading of homework assignments and exams, supervision and evaluation of student projects, website development, and presentation of approximately 25% of lectures for a small undergraduate seminar on the science, politics, and policy implications of climate change
- Introduction to Weather (Winter 2005 and Winter 2007): responsible for grading, generation of quizzes and exams, one-on-one tutoring, and teaching of weekly quiz sections for large (250-student) undergraduate weather course

### **Lead Teaching Assistant, University of Washington** (Fall 2006 – Winter 2007)

Responsibilities included TA training and evaluation, maintenance of demonstration equipment, and development of curriculum materials for introductory-level weather courses.

### **Physics Laboratory Instructor, Bates College** (September 2001 – August 2003)

Co-taught laboratory sections of introductory Astronomy and Musical Acoustics courses.

- Responsible for laboratory curriculum development, set-up and maintenance of lab equipment, grading of student assignments, and maintaining office hours for one-on-one student help.
- Provided general computing (especially Linux-related) and instructional support for students and faculty in the Department of Physics & Astronomy on an as-needed basis.

### **Adjunct Physics Instructor, Bucknell University** (January–May 1996)

Taught two laboratory sections of an introductory calculus-based Physics course. Supervised the work of undergraduate teaching assistants for these laboratory sections.

### **Physics Teaching Assistant & Tutor** (Bucknell University 1991-94, Colgate University 1994-95)

Co-taught laboratory sections of introductory physics courses in cooperation with physics faculty; also coordinated weekly physics help sessions.

### **Writing Tutor, Bucknell University Writing Center** (1992)

Used non-directive tutoring strategies to assist student with writing across all academic disciplines.

**CONFERENCES,  
WORKSHOPS,  
AND  
PRESENTATIONS**

**Advanced Course in Climate Dynamics, Espesrend, Norway** (June 2009)  
presentation: "Projecting ENSO-related variability in a warmer world"

**Graduate Climate Conference, Eatonville WA** (April 2009)  
session chair for Climate of the Tropics  
presentation: "Projecting ENSO-related variability in a warmer world"

**Advanced Institute on the Asian Monsoon, Honolulu HI** (January 2008)  
presentation: "Toward improved regional projections of future climate: biases and uncaptured variability"

**Graduate Climate Conference, Eatonville WA** (October 2007)  
presentation: "Empirical rainfall prediction in Jiangxi province, China"

**Highline Community College, Des Moines WA** (May 2006)  
honors colloquy lecture: "Real change: making sense of the climate system"

**Graduate Climate Conference, Eatonville WA** (April 2006)  
presentation: "Drought recurrence and seasonal rainfall prediction in Mexico's Rio Yaqui basin"

participant in **Program on Climate Change Summer Institutes**

- Couplings Between the Climate System and Biogeochemistry: Friday Harbor WA (September 2007)
- El Niño: Past, Present, and Future: Leavenworth WA (September 2005)
- Climate of the Arctic: Leavenworth WA (September 2004)

**ADDITIONAL  
TEACHING  
EXPERIENCE**

**Faculty Member, Olney Friends School** (August 1996 – June 2001)  
Olney Friends School is an alternative, co-educational, college-preparatory boarding school for grades 9-12, located in rural southeastern Ohio.

- **Teacher:** Developed and taught courses in Precalculus, A.P. Calculus, Physics, and Chemistry within an integrated curriculum designed to address student needs and reflect community values.
- **Technology Coordinator:** Responsible for system administration and general computing support in a mixed Windows/Linux/macOS environment. Led installation of a new building-wide network and migration of computing infrastructure to a Linux-based client/server system.
- **Activism/Outreach:** Worked with alumni, school administrators, board members, and other constituents to help facilitate a major transition in school governance.
- **Additional roles:** Academic Affairs Coordinator, Boys Dorm Head Resident, Outdoor Education Coordinator, and Assistant Soccer Coach.

**Teaching Intern, Choate Rosemary Hall** (Summer 1995)  
Co-taught courses in Optics and Conceptual Physics under the supervision of master teachers during Choate's summer session. Supervised boys in dormitory setting and led daily hiking activity.

**Student Teacher, Sherburne-Earlville Senior High School** (Spring 1995)  
Taught two sections of NY Regents Physics under the supervision of a master teacher. Had primary responsibility for all instructional, evaluatory, and disciplinary tasks for 12 weeks.

**STEP Peer Counselor, Bucknell University** (Summer 1994)  
Served as resident counselor and Precalculus teaching assistant, helping non-traditional students from the Community College of Philadelphia transition to competitive four-year colleges.

**Teacher Aide, Shonto Boarding School** (January 1993)  
Volunteered in math and science classrooms with seventh and eighth grade students at a Bureau of Indian Affairs boarding school on the Navajo Reservation in northern Arizona

**MISCELLANEOUS** Secondary (7-12) **Physics Teacher Certification** for New York and Pennsylvania.