

# Jennifer S. Coble

4303 E. Greensboro Chapel Hill Rd • Graham, NC 27253 • 919-962-3705 • jcoble@bio.unc.edu

---

## EDUCATION

### University of North Carolina at Chapel Hill

Ph.D. in Science Education, May, 2006

Dissertation: "Curricular Constraints, High Stakes Testing and the Reality of Reform in High School Science" Advisor: Dr. Dwight Rogers

### University of California at San Francisco

Masters in Biomedical Science, August, 2001

Thesis: "Binding of human BOL, the analog of the *Drosophila* meiotic regulator"  
Advisor: Dr. Renee Reijo Pera

### North Carolina State University

Bachelor of Science in Science Education, May, 1998

Bachelor of Science in Biological Sciences, May 1998

## LICENSURE

North Carolina Secondary Comprehensive Science Professional Teaching License

North Carolina Methods Faculty Member Professional Teaching License

## PROFESSIONAL EXPERIENCE

### Teaching Associate Professor

UNC-BEST Program Coordinator

August 2017-current

### Teaching Assistant Professor - Department of Biology

University of North Carolina at Chapel Hill, Chapel Hill, N.C.

January 2015-July 2017

### Lecturer - Department of Biology

University of North Carolina at Chapel Hill, Chapel Hill, N.C.

September 2007-January 2015

### Clinical Assistant Professor – School of Education

University of North Carolina at Chapel Hill, Chapel Hill, N.C.

May 2006 – July 2007

### Science Teacher

Carolina Friends School, Durham, NC

August 2004 – June 2008

### Student Teaching Supervisor – School of Education

University of North Carolina, Chapel Hill, NC

January 2001 – May 2003

### Science Education Teaching Assistant – School of Education

University of North Carolina, Chapel Hill, NC

June 2001 – August 2003

### Teaching Assistant - Department of Biomedical Science

University of California, San Francisco, CA

August 2000 – August 2001

## HONORS

- Biology Faculty Teaching Award for excellence in the teaching of biology, 2018
- Tanner Award for Excellence in Undergraduate Teaching, 2013
- Achievement Reward for College Scientists, University of California at San Francisco, 1999 & 2000
- Graduated Summa Cum Laude, 1998
- Member of Phi Beta Kappa and Phi Kappa Phi Honor Societies, Invited 1997

## BIBLIOGRAPHY

- Coble, J. (January 2015) Developing authentic Nature Of Science (NOS) understandings in pre-service teachers. Paper presented at the 2015 Association for Science Teacher Educators International Conference, Portland, OR
- Coble, J. (January 2011) Practicing What We Preach: Teaching Science Education With Inquiry. Paper presented at the 2011 Association for Science Teacher Educators International Conference, Tampa, FL
- Coble, J. (January 2008) Can Science Education Reform be a Reality in the Age of Accountability? Paper presented at the 2008 Association for Science Teacher Educators International Conference, St. Louis, MO
- Coble, J. (April, 2007) The Impact of High Stakes Testing on Beginning Science Teacher Practice. Paper presented at the 2007 National Association for the Research of Science Teaching Annual Conference, New Orleans, LA
- Coble, J. (2006) Curricular Constraints, High Stakes Testing and the Reality of Reform in High School Science Classrooms. Doctoral Dissertation, University of North Carolina at Chapel Hill
- Coble J. (April, 2000). Role of BOL, the human analog to *Boule*, in human fertility. Masters theses. University of California at San Francisco, CA

## TEACHING RECORD

### **BIOL 410: Principles and Methods of Teaching Biology – Spring 2008 – current**

Designed biology teaching methods course for the UNC-BEST program to support future teachers' conceptual understanding of biology and ability to implement effective science teaching methods. Coordinate fieldwork component that involves students working in local high school science classrooms.

### **EDUC 569: Student Teaching Internship – Spring 2008 – current**

Coordinate student teaching placements in local schools for professional teaching internship. Observe lessons and conduct post-observation conferences to identify teaching strengths challenges and future goals. Lead student teaching seminar to support student teachers' reflection on their practice and communal support. Evaluate professional teaching portfolio.

### **BIOL 810: College Science Teaching – Fall 2011, 2012, 2013, 2014, 2015, 2016**

Designed course for graduate students and postdoctoral fellows to develop the knowledge and skills needed to implement student-centered and active science instruction at the postsecondary level. Support students in designing curricula for future science course.

**EDUC 565: Teaching Science in the Middle Grades – Fall 2016**

Designed science teaching methods course for the future middle school teachers. Course supported future teachers' conceptual understanding of science and ability to implement effective science teaching methods.

**BIOL 113: Issues in Modern Biology – Fall 2013**

Served as instructor of record and mentor for graduate students in the Science Educator Certificate program who taught the course. Supported graduate students in curriculum design and assessment, observed teaching and provided feedback on instruction.

**BIOL 293/BIOL 295: Undergraduate Research – Fall 2008 – current**

Support and advise undergraduate biology students during undergraduate research internships. Provide instruction in scientific writing and evaluate final research papers.

**EDUC 601: UNC-BEST Seminar – Fall 2009 – current**

Engage pre-service science teachers in exploration of critical topics in STEM education. Coordinate visits by local educational leaders and UNC-BEST alumni.

**EDUC 600 -- Science Teaching – Summer 2007**

Redesigned intensive summer course for lateral entry middle school and high school science teachers in the NC TEACH program. Course focused on exploring the goals of science education, the challenges and dilemmas inherent in science teaching as well as how a project based science approach can support student learning.

**EDUC 775 -- Seminar in Science Education - Spring 2007**

Established curriculum for distance education masters level course for practicing K-8 science teachers. Taught a project based science unit where teachers learned about weather, energy and chemistry concepts through an exploration of the driving question, "Should we be concerned about global warming?"

**EDUC 550 -- Secondary Science Methods II - Spring 2007**

Established curriculum for master's students in secondary science education, which focused on exploring the challenges they face while student teaching and the strategies to mitigate these challenges. Modeled project based science teaching and supported teachers in developing project based unit plans for their science classrooms.

**EDMX 775 - Teaching Science in the Elementary Grades - Fall 2006**

Taught undergraduate students in the Elementary Education program the understandings and skills needed to develop and implement inquiry-based instruction through a focus on the integrating essential science concepts within the N.C. Standard Course of Study through a project based approach.

**EDMX 777 - Perspectives in Science Education: Life Science - Summer 2006**

Redesigned distance education masters level science education course for practicing K-8 science teachers. Taught concepts of biochemistry, energy, human physiology and cell biology through a focus on the driving question, "Are you really what you eat?"

## GRANTS

### Howard Hughes Medical Institute for Future Teachers Internship

Awarded May 2010 – \$ 65,000

Co-author on HHMI grant that provides funding for eight UNC-BEST pre-service science and mathematics teachers to conduct a summer research and curriculum design internships. Grant also provides funding for graduate student mentors.

### Teachers for a Competitive Tomorrow – United States Department of Education

Awarded September 2009 - \$ 1,250,000

Co-author of grant to support expansion of UNC-BEST program to Chemistry, Geology and Mathematics Department and development of professional development programs for UNC-

## PROFESSIONAL SERVICE

<b>Faculty Council – UNC Faculty Governance</b>	August 2017 - current
<b>Teaching Faculty search committees</b>	2012, 2013, 2014, 2017
<b>NCSSM Biology Department External Reviewer</b>	May 2016 – December 2016
<b>Chair of Educational Policy Committee – UNC Faculty Governance</b>	May 2014– May 2016
<b>Educational Policy Committee – UNC Faculty Governance</b>	Fall 2011 – May 2017
<b>Tanner/Friday Teaching Award Committee – UNC</b>	Fall 2014
<b>Science Education Certificate Advisory Board – UNC</b>	Fall 2012 – May 2015

### **Invited UNC Science Education Presentation and Workshops**

- Backward Design and Syllabus Development (July, 2018) Workshop offered for Training Initiatives in Biomedical and Biological Sciences (TIBBS) Science Educator Seminar Series
- Designing Active Learning Course Syllabi (June, 2015) Workshop offered for Training Initiatives in Biomedical and Biological Sciences (TIBBS) Science Educator Seminar Series
- Promoting Conceptual Understanding (August, 2013) Presentation to UNC Chemistry Graduate Teaching Assistant during summer training
- Course Design and Lesson Planning 101 (September, 2013) Workshop to Seeding Postdoctoral Innovators in Research & Education (SPIRE) postdoctoral fellows (SPIRE) postdoctoral fellows
- Designing Course Syllabi (June, 2013) Workshop offered for Training Initiatives in Biomedical and Biological Sciences (TIBBS) Science Educator Seminar Series
- Using Process Oriented Guided Inquiry Learning (POGIL) in your science classroom (February 2012) Presentation to visiting Wake and Charlotte-Mecklenburg County school district teachers hosted by UNC Office of Undergraduate Admissions
- Active Learning in College Classrooms (June, 2010) Workshop offered for Training Initiatives in Biomedical and Biological Sciences (TIBBS) Science Educator Seminar Series
- Student Centered Science (July 10, 2009) Presentation to Morehead Planetarium Teacher Advisory Board Meeting