

ROBERT A. MAXWELL, Ph.D.

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EDUCATION

Ph.D., Biology (Applied and Environmental Microbiology) 2005

Georgia State University, Atlanta, GA

Dissertation: "Dynamics of a Two-Member Bacteria-Fungal
Microbial Biofilm Community."

M.S., Entomology 1993

University of Georgia, Athens, GA

Thesis: "The Effect of *Rhododendron maximum* upon Microbial
Populations in a Southern Appalachian Watershed."

B.S., Microbiology 1989

University of Georgia, Athens, GA

**TEACHING
EXPERIENCE**

Academic Professional

Georgia State University, Atlanta, GA

January 2007 - Present

- Courses Taught:
 - Anatomy and Physiology (BIOL 1110K and 1120K)
 - Biosafety: Principles and Practice (BIOL 4694/4694)
 - Directed Readings (4999)
 - General Biology for Majors (BIOL 2107)
 - Genetics (BIOL 3900/5900)
 - Immunology (BIOL 4278/6278)
 - Instructional Methods (BIOL 7802)
 - Internships in Biology (BIOL 4916)
 - Medical Microbiology (4428/6428)
 - Microbiology and Public Health (BIOL 2300)
 - New Student Orientation (GSU 1010)
 - Plant Sciences (BIOL 3820)
 - Topics in Biology (BIOL 4920/6920)
 - Epigenetics
 - Teaching Assistant Primer
- Coordinator for the Fundamental Microbiology Lab (BIOL 2310), an undergraduate microbiology laboratory class that serves students seeking careers in health occupations. In addition, serve as the coordinator for the Microbiology and Public Health lecture course (BIOL 2310).

- Coordinator for the lab for Microbiology (BIOL 3890/7890), a microbiology laboratory course directed to undergraduate majors and graduate students in Biology. In addition, serve as the coordinator for the Microbiology lecture course (BIOL 3880).
- Coordinator for the lab for Genetics (BIOL 3910/7910), a biology laboratory course directed to undergraduate majors and graduate students in Biology. In addition, serve as the coordinator for the Genetics lecture (BIOL 3900).
- Served as Advisor and Reader for Non-Thesis Master Students.
- Serve as the Faculty Fellow for the STEM Living Learning Community (2014-2017).
- Served as the Faculty Fellow for the Pre-Nursing Living Learning Community (2012-2014).
- Faculty Advisor for the Bachelor in Interdisciplinary Studies Environmental Sciences program (2012-2015).
- Participant in Incept Academic Panel (2014-2015).
- Served on the NTT Promotion Guidelines review committee.
- Served as a Faculty Mentor in the College of Arts and Sciences MAP (Mentor and Advising Program) 2018
- Served on the College of Arts and Sciences College to Career QEP committee.
- Served on GSU Faculty Senate (2018-current); Faculty Affairs and IIT subcommittees; Chair of Tech Fee Allocation review committee.
- Chair of the TA Assignment committee for the Department/School of Biology.

Visiting Lecturer

Georgia State University, Atlanta, GA

January 2006 – December 2006

- Taught classes in Anatomy and Physiology, Genetics, Microbiology and Public Health, and Plant Sciences.

Teaching Assistant, Department of Biology

Georgia State University, Atlanta, GA

January 2001 – December 2002

- Taught lab sections of Anatomy and Physiology II.
- Aided the previous Anatomy and Physiology professor in establishing a WebCT resource for the class.
- Created a library of digital photos for the Anatomy and Physiology lab, and an online quiz of these photos as a supplement to lab.
- Taught lab sections of Microbiology for non-majors.

- Assisted professors in establishing WebCT resources for General Microbiology, Advanced Microbiology, Biosafety, and Fermentation Microbiology

Assistant Professor, Department of Biology

Darton College, Albany GA

September 1993 – June 2000

- Prepared and presented lectures for General Biology, Environmental Science, Anatomy and Physiology, Microbiology, and Science, Technology and Society.
- Class preparation included writing exams, grading papers, tests, essays and labs; problem solving with students; student advising; building the course Science, Technology and Society; and committee work.
- Editor of the Darton College Science and Mathematics Newsletter, part of the departments outreach to primary and secondary school teachers in the Southwest region of Georgia.
- College and community committee work, including Academic, Faculty Search, Instructional Technology, Library and Semester Conversion committees, Local Emergency Planning Committee and organizer of local Earth Day activities. Chair of Faculty Searches and the Instructional Technology committee.
- Attended the Fall Faculty Development Workshop hosted by the Board of Regents of the University System of Georgia; a two week workshop devoted to advanced uses of instructional technology, including authoring software, web design, graphics, computer animation, and teaching tools. Included three month collaboration with other faculty from around the state.

Director of the SW Regional GA Adopt-A-Stream Training Center

Darton College, Albany, GA

January 1996 – December 1996

- Coordinated Adopt-A-Stream activities for the Southwest region of Georgia.
- Responsible for coordinating training sessions and community activities; preparing materials; and teaching workshops on the Adopt-A-Stream procedures and protocols.

Teaching Assistant, Biology

University of Georgia, Athens, GA

September 1989-1993

- Taught labs supporting General Biology, Ecology and Entomology.

- Prepared and presented lectures, problem solved with students, wrote exams.
- Graded papers, tests and lab reports.

Research Experience

Post-Doctoral Research Associate
 Georgia State University, Atlanta, GA
 January 2005-Present

- Conduct research into Indoor Air Ecology and the effects of volatile organic compounds on fungal physiology.
- Train new undergraduate and graduate students.
- Assist professors in using WebCT CE and WebCT Vista.
- Build database of laboratory protocols.
- Grant writing.
- Currently finalizing two papers for submission to peer review journals.

Summary of Dissertation

Examined lipid profiles of bacteria and fungi grown individually and as a community to determine the impact that juxtapositional growth has upon their physiology of the two organisms.

Teaching Competencies

General Biology
 Anatomy and Physiology for Allied Health Career Programs
 Applied and Industrial Microbiology
 Biosafety
 Botany
 Entomology
 Ecology (Population, Community and Ecosystem)
 Environmental Science
 Immunology
 Biology Instructional Methods
 Medical Microbiology
 Microbiology
 Mycology

Fellowships

CETL Faculty Teaching Fellowship Fellowship 2017-2018.
 Continued research on metacognition and student success in Principles of Biology. Co-Lead of a Faculty Learning Community on Metacognition and Emotional Intelligence.

College-to-Career Faculty Fellowship 2018.
 Developed career modules for STEM disciplines to be used in GSU 1010.

Chancellor's Faculty Learning Scholars 2018-current.

A University System of Georgia initiative to course products emerging from faculty conversations led by faculty leaders within each institution with CETL support.

Publications

“Seasonal dynamics of nematode and microbial biomass in soils of riparian-zone forests of the Southern Appalachians,” *Soil Biology and Biochemistry* 27:1 79-84.

Presentations

“FAME Analysis of Components in a Simple Two-Member Community,” Poster Presentation, Georgia State University Environmental Research Center’s Biofilm Briefing, May 2004.

“FAME Analysis of Components in a Simple Two-Member Community,” Poster Presentation, American Society of Microbiology General Meeting, May 2004.

“Bacterial-Fungal Communities: An Initial Survey,” Poster Presentation, American Society of Microbiology Southeastern Branch Meeting, October 2004.

“Phenotypic Alterations of Fungi Caused by Exposure to 2,4,6-Trichloroanisole,” Poster Presentation, Georgia Life Sciences Summit, October 2005.

“Blended Undergraduate Biology: A Connectivist Approach”, Oral Presentation, Social Learning Summit, April, 2012.

“Blended Learning in Biology”, Instructional Innovation Conference, GSU, April, 2014.

“Hybrid Teaching in the Classroom: Examples from Biology”, GSU STEM Education Workshops, June, 2014.

“Engaging Students Through Peer Review”, Panelist, Center for Instructional Innovation, January, 2015.

“Rapid Response Lab Reports”, American Society for Microbiology Conference on Undergraduate Education, July, 2016.

“Cultivating Perseverance through Study Plans”, American Society for Microbiology Conference on Undergraduate Education, July, 2017

“Mix of the Old and the New; Identification of Bacteria”,
American Society for Microbiology Conference on Undergraduate
Education, July, 2017

Editorial Board	Laboratory Safety Review Committee member, Journal of Microbiology & Biology Education (JMBE), 2016 – Present Review and Revision of the ASM Biosafety Guidelines for Instructional Laboratories, 2018.
Professional Affiliations	American Society of Microbiology American Biosafety Association American Association for the Advancement of Sciences American Association of Colleges and Universities Association for Biology Laboratory Education National Organization of Gay and Lesbian Scientists and Technical Professionals National Research Mentoring Network
Honors and Awards	Recognition Award for Innovation and Early Success in Textbook Transformation. GA Board of Reagents. December, 2014.
Fellowship	Center for Excellence in Teaching & Learning, Faculty Fellowship Award, 2017. College to Career Faculty Fellowship Award, 2018. Chancellor’s Learning Scholars Fellowship, 2018.
Coursework	Applied Microbiology, Advanced Microbiology, Bioanalytic Chemistry, Biochemistry, Biogeography, Biological Imaging, Biotransformation of Active Molecules, General Ecology, Ecological Modeling, Experimental Microbiology, Fundamentals of Microbiology, General Biology, General Entomology, General Microbiology, Genetics, Historical Perspectives in Microbiology, Human Physiology, Immunology, Lab Methods in Microbiology, Microbial Ecology, Microbial Physiology and Genetics, Molecular Biology Techniques, Molecular Cell Biology, Mycology, Pathogenic Bacteriology, Philosophy of Science, Plant Anatomy, Plant Communities of the Southeast, Plant Systems & Evolution, Population Ecology, Principles of Toxicology, Soil Invertebrate Ecology, Statistical Methods, Stream Ecology, Symbolic Logic, Terrestrial Biogeochemical Cycling, Theories of Knowledge.