Aaron Kratzer

Curriculum Vitae

Education

2017–2018 **Post-Baccalaureate Study/Preparation**, *Oregon State University*, Corvallis, Oregon.
Advanced Macroeconomics, Graduate Microeconomics
Future classes: Statistics, Econometrics, Discrete Mathematics, Economic Research & Writing

2010–2014 **BS Physics**, *Oregon State University*, Corvallis, *3.72/4.00*.
Intensive physics education, research, and TA experience

Bachelor thesis

Title *Measurement and Modeling of Zinc Sulfide Thin Films: A Comparison of Optical Characterization Techniques*

Supervisors Dr. McIntyre, Dr. Tate

Description Thin films were analyzed for layer thickness and other characteristics using reflection spectroscopy (RS), spectroscopic ellipsometry (SE), and modeling programs. RS and well-studied values from literature were used to model film thickness based on reflection and the SCOUT modeling program was used to analyze RS data, generate model RS data, and compare to the SE technique of film characterization. `http://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qt26r`

Research Interests

Environmental economics; climate change impacts, and mitigation and adaptation policy analysis; policy impacts on disadvantaged communities.

Experience

Teaching

2013–2014 **Ph 41X Teaching Assistant**, *Department of Physics, OSU*, Corvallis, OR.
Introduced upper-division physics undergrads to experimental techniques, professional lab reports, and the physical concepts behind electronics.
- Developed electronics curriculum;
- Purchased materials;
- Educated through lecture, peer facilitated learning, and computational programming experiences.

Research

2011–2014 **Research Assistant**, *Department of Physics, OSU*, Corvallis, OR.
- Sought out research project early on in undergraduate study.
- Independently mastered SCOUT modeling program and experienced in VASE32 Ellipsometry modeling;
- Utilized Reflection-Spectroscopy and Ellipsometry equipment and techniques to collect data;
- Researched relevant literature and documented important features of data-collection and modeling processes.

Non-academic

2015–Present **Support Services Coordinator**, *Jackson Street Youth Services*, Corvallis, OR.
Recruit and coordinate volunteers, data quality/ collection and database management, staff training organizer.
- Created and manage multiple Access and online databases;
- Provide technical assistance and data quality management;
- Orient, train, and supervise volunteers and service groups;
- Support directors and supervisors in employee on-boarding and termination;

Relevant Volunteering and Outreach

2012–2014 **Coordinator/Secretary**, *Society of Physics Students, OSU*, Corvallis, OR.
Leading/organizing Journal Club, professional development, and outreach activities.

2014–2016 **Co-facilitator**, *OSU Campus Coalition Builders*, Corvallis, OR.
Team-facilitating the Welcoming Diversity workshop for OSU faculty and staff.

Computer skills

Programming	Python	**Professional-Writing**	LaTeX, MS Office, Open Office
	C++		
	Matlab	**Database-Management**	MS Access (proficient)
	Linux/Windows scripting		Apache (novice)

References

Name	Relationship
o Dr. Jeffrey Reimer	o Economics Course Instructor/Mentor
o Dr. Janet Tate	o Physics Course Instructor/Research Advisor
o Dr. Corinne Manogue	o Physics Course Instructor/Mentor