

PURSUING A CAREER AS A MATHEMATICS PROFESSOR IN A LIBERAL ARTS COLLEGE

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OVERVIEW

- Background and career path
- Being a mathematics professor in a LA college
 - Teaching
 - Research
 - Service
- Job application

MY BACKGROUND AND CAREER PATH

- Bachelor's in Applied Mathematics from UNICAMP (Brazil)
- MS and Ph.D. in Mathematics from SIUC (probability and stochastic processes)
- 1st job: VAP at Wittenberg University (LA college with ~1700 students in Springfield, OH), 3 years
- 2nd job: AP of mathematics and statistics at Antioch College (LA college with ~300 students in Yellow Springs, OH), 4 years
- 3rd job: AP of mathematics (statistics) at Colorado College (LA college with ~2200 students in Col Spgs, CO), 3+ years (2018 to present)

BEING A PROFESSOR IN A LIBERAL ARTS COLLEGE

- What is a liberal arts college?
 - Liberal arts comprises the humanities, arts, social sciences, and natural sciences.
 - Promotes general education, interdisciplinarity, critical thinking, and creative problem-solving.
 - Emphasizes teaching in small class sizes and student-faculty interactions.
- Three main components, like most TT academic jobs: teaching, research, and service.
 - All are seen as essential, but teaching takes the highest priority (excellence expected).

TEACHING

- Teaching is a high priority (small classes, no more than 25-30 students)
- Teach 4-6 classes per year, possibly some repeated.
- Expected to teach all levels and possibly beyond your expertise.
- Smaller departments usually means not as much variety of courses as a larger institution. More specific courses are taught as "topics courses" or independent studies.
- Lots of faculty-student interactions expected (natural given the size of the schools and faculty-student ratio)
- Students are generally interested in doing research with their professors.

RESEARCH

- Doing research is an essential part of the job, but expectations tend to be more mild than in research-focused institutions.
 - Peer-reviewed scholarship required.
 - Grants are a plus, but not required.
 - Some LA colleges have a broad definition of scholarship (Boyer's model).
- Easy to change research interests or to have several.
- Should have student-friendly research (it can be your main research or not).
- Collaboration with colleagues, specially from other departments, is highly regarded.

SERVICE

- Expected to serve on campus-wide and department committees.
- Likely to eventually serve as department chair.
- Students often serve on committees.
- High impact on department and institution.
- Advising students in general education and departmental major.

PROGRESSION THROUGH CAREER

- Salary usually depends on rank of school and candidate's experience
- Promotion and tenure process
 - Excellence in teaching expected
 - Peer-reviewed scholarship expected
 - Fair share of service expected

APPLYING TO LIBERAL ARTS COLLEGES

- Read closely the job add and use it to build a strong application.
- High interest in teaching should come across in the cover letter and teaching statement.
- Show interest in teaching broadly in your area, lower and upper level. Have ideas for topics courses or creating new courses based on the existing curriculum. Showing familiarity with the curriculum is a plus.
- Materials should show promise in sustaining research, usually one or more of these: Letters from professors stating promise in research, submissions, pubs.

APPLYING TO LIBERAL ARTS COLLEGES

- Specifically mention experience/interest/ideas working on research with students (clear ideas for projects is a plus)
 - "The successful candidate should also be able to develop and maintain a rigorous research program that can engage undergraduate students."
- Most math majors will have a capstone requirement (thesis, seminar, etc). Be ready to address your interest in mentoring students.
- Address diversity, equity and inclusion (DEI) in teaching and diversity statements.
- Mention distinguished features of LA college that attracts you, and distinguished features of the institution you are applying to that attracts you.
 - "Applicants should describe their interest in teaching mathematics in a liberal arts environment in their cover letter."

QUESTIONS?

Thank you!