

First Year Research Award: **Math and Computer Science**

Faculty Supervisor: **Professor Adam Parker**

Position Title: First Year Research Scholar in Math and Computer Science

Criteria: At Wittenberg, we all strive to pass our light to others. If your light is in a STEM field and if you want to pass that light to others in a classroom, then this is an exciting opportunity to help start and evaluate a brand-new teacher training program at Wittenberg. The Department of Mathematics and Computer Science, with help from the Department of Education will offer a First Year Research Award for the academic year 2024-2025 to one incoming student to work with Dr. Adam Parker. These students will have a demonstrated academic ability and research interest in STEM and/or K-16 Education.

Expectations: FYRA Scholarship recipients will devote between 4 and 6 hours per week across their first year to FYRA program and their research-related project, according to the FYRA Learning Contract agreed upon by the sponsoring professor and the scholarship recipient. Recipients will also be expected to participate in a regular meeting of FYRA recipients, present their results in an appropriate forum and submit a copy of their presentation to the appropriate university office. FYRA Scholarship recipients will also participate in an assessment of the FYRA program. (The FYRA Scholarship is not part of a student's work study award.)

Research Activity: The selected student will assist Dr. Adam Parker, Professor of Mathematics, in his research implementing and assessing a new Learning Assistant (LA) program at Wittenberg. Learning Assistants are undergraduate students embedded in a (typically) STEM class that they have already successfully completed. They also complete a pedagogy class and meet weekly with the class instructor and assist the professor in active classroom pedagogy. Much research exists on the value of LA programs at large institutions, but little to none exists on the effectiveness of such programs at small liberal arts institutions. We hope to begin to fill this void in the literature, and the selected student will be an important part of that process. The specific project will be determined based on the selected student's background and interests, but some options would be to examine if a Wittenberg LA program accomplishes the three goals of any LA program:

- Improve the learning of the students in classes utilizing embedded LAs.
- Recruit additional K-12 STEM teachers.
- Facilitate change to research-based teaching at both the course and institutional level.

Applicants should be detailed oriented, reliable, and motivated to learn. It is not necessary that the FYRA applicant to want to be an LA, though that would be a benefit. Similarly, one of the first test courses for Learning Assistants will be Dr. Parker's Calculus 1 class, and so an applicant should be comfortable with math and ideally willing to take Calculus 1. For additional information, please contact Dr. Adam Parker directly at aparker@wittenberg.edu.