**MATHEMATICS CUE INDEPENDENT RESEARCH PROJECT**

**Description and Application Information**

**Description**: One option for fulfilling the CUE requirement in the mathematics major is the design, execution, and completion of an appropriate research project. This may involve at most two students and must be supervised by a department faculty member. A student can investigate a branch of mathematics for which there is no Muhlenberg course, conduct original research in mathematics or statistics initiated at Muhlenberg, or follow-up summer research conducted at a college or university. *The Mathematics CUE requirement can only be fulfilled by a mathematics major during that major’s senior year.*

A CUE project must be formally proposed by the student(s) by filling out the application below and approved by the department. Students whose research project is approved should register for the course MTH 975 CUE: Directed Research during the semester in which they are completing the project.

**Project Requirements**: Each participant will submit a paper detailing the mathematical work completed and a presentation at an appropriate local/regional/national mathematics conference. Such meetings typically occur outside of Muhlenberg College.

The two-part application consists of a completed *Mathematics CUE Independent Research Project Application* form (which is below). ***Applications should be submitted both on paper with signatures from both the student and faculty advisor) and electronically via email to the CUE Coordinator (whose name is listed at the bottom of this form).***

**Deadlines:**

***For students wishing to register for MTH 975 CUE Directed Research during the Fall semester of their senior year, applications are due on the first Friday in April in the preceding Spring semester.***

***For students wishing to register for MTH 975 CUE Directed Research during the Spring semester of their senior year, applications are due on the first Friday in November in the preceding Fall semester.***

Below is an ideal timeline for constructing a Mathematics CUE proposal:

*Three Weeks Before the Deadline*: Have a departmental faculty member provisionally agree to be your advisor for your project.

*Two Weeks Before the Deadline*: Submit a draft of the synopsis of the proposed project to your advisor so that your advisor can make edits and suggestions for your final proposal.

*On or Before the Deadline*: Submit your completed formal application which consists of both a completed *Mathematics CUE Independent Research Project Application* formand the required synopsis of the proposed project as described on that form.

**CUE COORDINATOR** (to whom application materials should be sent)**:** Dr. Will Gryc

**MATHEMATICS CUE INDEPENDENT RESEARCH PROJECT APPLICATION**

Student Name: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Expected Year of Graduation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Faculty CUE Advisor: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Title of Proposed Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Semester of CUE Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please type the answers to the following in the page below:

1. Describe how the project will be evaluated both during the semester and summatively at the end of the semester.
2. One of the requirements of the research CUE is to present your work at a conference. At what public conference do you plan to present your research?
3. List some references that you plan to consult during the semester.
4. Write an around one-page abstract that clearly describes the proposed research project including appropriate background information and a careful articulation of the scholarly questions that will be addressed. (You may write this abstract using another word processing format, such as LaTeX, if you prefer. Just include that separate file when you submit this application, and write “In separate file” below.)

CUE Advisor’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Student’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_