

**EDLE 791**  
**Mathematics Education Internship Guidelines**  
**Instructor: Margret Hjalmarson, Ph.D.**

These Guidelines for preparing proposals are similar to those for all mathematics education courses in which independent study or mentoring is the primary method of study and interaction with the instructor. Programs for which these courses are currently available include: Mathematics Education Leadership (M.Ed. Cohort), Mathematics Education Leadership (PH.D. cohort), and ASTL (secondary mathematics).

These courses require a proposal describing a student's academic activity for the course. The proposal must be approved in advance in writing by the mentoring professor. Generally, students prepare the proposal as a draft. Students may confer with the mentoring professor for preliminary guidance, if needed. Phone conversations or in person meetings can be scheduled at any stage of the development of the draft or final proposal. Many students find that they are able to prepare proposals with little initial consultation since they are enrolled in specialty programs and/or are already working with the mentoring professor.

- Students prepare a proposal for these courses describing 135 hours of intellectual, academic activity they intend to pursue.
- Students may complete the course in any agreed upon time frame with the mentoring professor: e.g., a semester, an academic year, a calendar year, etc.
- Proposals must be approved in writing by the mentoring professor. EDUC 598 and EDUC 897, also require the approval of the Assoc. Dean of the Graduate School of Educ. or the Coordinator of the Ph.D. program, respectively, before a student may enroll.
- Proposals should be 2-4 pages in length.

Proposals must include the following 7 sections:

1. **Introductory Information.** At the top of page 1, state each item A, B, and C on a different line:
  - A. Your name & G# Number;
  - B. The course identification xxxx yyy, which is the 4 letters and 3 numbers for the course (e.g., EDCI 597), the name of the course, and the number of credits for the course, written as (3 cr.); and
  - C. The semester or term in which you registered for the course **and** the expected date of completion and submission of the final products proposed.
2. **Goals and Objectives.** In this section of the proposal, students describe the general goals and specific objectives they expect to accomplish in the course (e.g., what does the student hope to learn or be able to do by the end of the internship?).
3. **Title.** In this section of the proposal, students recommend a title of the independent study or special topic. *NOTE:* The title should be given in two versions – the title as desired **and** a reasonable version of the title limited to a maximum of 23 characters.
4. **Reading List –** The proposal should include a set of readings from mathematics education determined by the student and the professor. This could include a book or a set of articles. The quantity of the reading will depend upon other products to be developed as part of the internship.
5. **Final products.** Describe all of the final products to be produced during the course. In all cases there must be a **minimum of three final products** selected from the following list:

Possible final products:

- A. *Evidence of Academic Readings* - such as an Annotated Bibliography or Literature Review paper. Generally, an Annotated Bibliography includes a brief description of the content of the book(s), article(s) or other readings. Annotations should be **brief**, but of sufficient length to convey to a reader (whether familiar or not familiar with a particular citation) that the student has captured the essence of the material in the reading. A Literature Review paper presents a summary and analysis of the readings and their implications for mathematics education. The quantity of readings required will depend on other projects selected for the internship.
  - B. *Professional Development Design* – The student may design, develop, and refine a professional development experience for teachers. This should include a plan and an accompanying materials for the professional development, a written reflection paper about the professional development experience (3-5 pages) describing how the goals for the professional development, what was learned by the student, and how the professional development could be modified for future use.
  - C. *Action Research Project* – The research project should be supported by readings from the literature. The student may design a question, collect data, and write a summary report of their findings based on an action research project conducted in their school or classroom. The question and data collection process must be approved by the instructor in advance. The student should prepare a final report of their findings for presentation to the professor at the conclusion of the study.
  - D. *Independent Project* - A third final product should be a project identified by the student. In selecting and identifying the final product(s), students have considerable discretion, though their final choice(s) must be pre-approved in writing by the mentoring professor. This approval in writing is provided in the form of the signature on the approved proposal. Students are encouraged to select final products that interest them and have relevance and meaning for their academic program of study, current educational position and/or professional career goals. However, the final products must reflect the student's stated goals and objectives as given for the course proposal; they cannot be independent, unrelated final products. Essentially, these final products are the student's opportunity to convey to the mentoring professor what has been read, learned, reflected upon, and found beneficial for the student's education and professional practice. Students are required to present the final project with accompanying documentation organized for review in a 3-ring binder notebook or in an electronic portfolio format.
6. **Time Allocation.** In this section of the proposal, students indicate the time they expect to devote to each task. The course does not meet in regularly scheduled time blocks. Instead, the total time spent by a student on the intellectual activity constituting the course is expected to be at least 135 clock hours (3 credits @ 45 hours per credit). Students may include in the 135-hour total a maximum of 15 hours for consultations with the instructor by email, phone or face-to-face meetings. Students should include at least the following categories when they outline how they intend to meet the 135-hour commitment:
- A. Readings
  - B. Design and implementation of final product #1
  - C. Design and implementation of final product #2
  - D. Design and implementation of final product #3
  - E. The estimated time to be spent in exchanges with the mentoring professor by email, phone or face-to-face meetings. (a max of 15 hrs.)

**Note:** Total time for this course should be at least 135 hours of intellectual activity. When submitting proposals, students should plan carefully and reasonably how they expect to allocate time among all of the proposed activities and tasks. For example, if a student intends to include the planning and presentation of a mathematics class or activity in a secondary school classroom other than their own as part of this course experience, some (but not all) of the time spent in preparing and presenting might be included as part of the 135 hours.

7. **Evaluation.** In this section of the proposal, students describe how they will be evaluated in the Internship. Generally, the evaluation consists of the following. (Please copy the information below into your proposal.)
- a. Successful planning and execution of the independent study design as evidenced by the submission of an approved proposal and the final products.
  - b. Periodic discussions in person, by phone and/or by e-mail with the mentoring professor throughout the independent study process.
  - c. Submission in writing of the agreed upon end products, each in a form consistent with the guidelines.
  - d. A meeting with the mentoring professor to discuss the course readings.
  - e. A final presentation with the mentoring professor to present the major project. Students are required to present the final project (item 5.C.) with accompanying documentation organized for review in a 3-ring binder notebook or in an electronic portfolio format.

If students have other evaluation criteria to propose, they can be included if they are pre-approved by the mentoring professor in the proposal. If students desire an alternate approach to the professor's evaluation, they may make a request as part of the proposal, in a separate section 8, titled, Alternate Evaluation Request. In this section students describe the proposed alternate evaluation, along with an appropriate rationale or justification for the request. When final products are evaluated by the professor, they are evaluated by determining if (a) the final products were the pre-approved ones; (b) the final products reflect the goals and objectives stated in the student's proposal; and (c) the final products are essentially accurate, logically consistent, well written or presented, and effective in communicating the student's thinking to the professor or other evaluators.

Importantly, final products are not evaluated on an A, B, C, etc. system. The final products in these independent study type courses are treated as Satisfactory or Unsatisfactory experiences. A Satisfactory evaluation always leads to an A and an Unsatisfactory leads to an Incomplete (INC or IP) grade for the course initially. Students have an opportunity to make whatever changes are called for to receive a Satisfactory, **provided it is accomplished by the deadlines established by the University** for the removal of INC or IP grades. Students are advised that if work outstanding is not submitted or never meets Satisfactory evaluation standards, the Professor will not change the final product or course grade and the University has standard policies on what happens to the grade of INC or IP.

**Note:** While the above guidelines cover most student needs, if for some appropriate reason(s), a student desires a modification or change, the student may make a request in writing as part of the proposal approval process. And, **if approved in writing by the mentoring professor**, such requests may become a part of the final, approved proposal.

## **VII. UNIVERSITY POLICIES**

The university has a policy that requests students to turn off pagers and cell phones before class begins.

### **HONOR CODE**

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University and with the desire for greater academic and personal achievement, George Mason University has set forth a code of honor that includes policies on cheating and attempted cheating, plagiarism, lying and stealing.

Detailed information on these policies is available in the GMU Student Handbook, the University Catalog, of the GMU website ([www.gmu.edu](http://www.gmu.edu)).

### **INDIVIDUALS WITH DISABILITIES POLICY**

The university is committed to complying with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 by providing reasonable accommodations for applicants for admission, students, applicants for employment, employees, and visitors who are disabled. Applicants for admission and students requiring specific accommodations for a disability should contact the Disability Resource Center at 993- 2474, or the University Equity Office at 993-8730.

### **ATTENDANCE POLICY**

Students are expected to attend the class periods of the courses for which they register.

Although absence alone is not a reason for lowering a grade, students are not relieved of the obligation to fulfill course assignments, including those that can only be fulfilled in class. Students who fail to participate (because of absences) in a course in which participation is a factor in evaluation, or students who miss an exam without an excuse, may be penalized according to the weighted value of the missed work as stated in the course syllabus (GMU University Catalog, pg. 32).