

**Pittsburg State University**  
**Department of Mathematics**  
**Criteria for Departmental Honors Projects**  
*Approved September 11, 2015*

Honors course work in the Department of Mathematics may take the form of one or more of the following subject to approval of the instructor and Chair of the Department. In all cases, requirements to take a mathematics course for honors are to be **above and beyond** the normal course expectations and assignments, involving at least 20 hours of additional work.

- Writing a paper, of at least 8 pages with a bibliography, on a topic related to and extending the course subject content.
- Conducting original mathematical research presented in a format approved by the instructor (e.g. a paper, or a presentation at a conference, colloquium or KME meeting).
- Making a class presentation of at least 20 minutes on a topic which involves considerable research and preparation.
- For BSEd majors, 1) researching a topic related to and extending the course subject content then writing a paper, of length 3 to 5 pages, with bibliography that provides sufficient background for teaching a lesson, 2) developing a lesson plan for a lesson appropriate for implementation in an advanced math high school classroom, and 3) preparing and presenting a multi-media presentation, appropriate for the same audience – 15-30 minutes in length. In addition, arranging for recording of the lesson presentation and 4) submission of a reflection over the presentation.
- Any other comparable learning experience approved by the instructor, the Chair of the Department, and the Department of Mathematics Honors Committee.