

PROPOSAL FOR A MERGER OF THE DEPARTMENTS OF MATHEMATICS AND STATISTICS

We propose that the faculty members currently belonging to the Department of Mathematics and to the Department of Statistics be housed in a new merged department to be called the Department of Mathematics, Applied Mathematics, and Statistics.

This document addresses the following four questions from the College of Arts and Sciences' *Guidelines: Creating, Merging, or Splitting a Department*.

- 1) Why should this proposal be approved?
- 2) What resources will be needed and/or expected?
- 3) What impact will approval of this proposal have on the department(s), the college, and the university?
- 4) How should the proposed process and results be evaluated?

1) Why should this proposal be approved?

This merger would create multiple opportunities not currently possible. Like other departments within the College, the departments of Mathematics and Statistics are smaller than corresponding departments in comparable institutions. This is a challenge to both departments. The Mathematics department needs to support growing undergraduate and graduate programs in mathematics and applied mathematics. Part of the service burden of the department has been handled by having introductory courses taught in large lecture format. Similarly, in Statistics, the small department size has presented challenges in course offerings, which have recently been met, in part, by the use of temporary faculty and graduate students. Due to the suspension of the statistics graduate program, there will be no more PhD students left who can teach by fall 2012. We believe that merging the two departments will allow the statistics graduate program to reopen, will facilitate

CWRU, the departments of Mathematics and Statistics were once in one department. Nationally, some universities have separate departments in mathematics and statistics, respectively, some have combined departments. Whether they are merged or separate depends on what is the best for each

which after a merger, could be the basis for new cooperative projects. The size of the Department of Mathematics, which currently has 18 tenured or tenure track faculty and one instructor, is small when compared to mathematics departments at peer institutions. This puts the department at a disadvantage when it comes to securing external funds, in particular for department-based programs as opposed to individual projects. The Department of Statistics is very small by any standard. It currently consists of two full professors and one instructor. It is expected that with a merger and new resources

combination of scientific computing, modeling and probabilistic methods, including computational statistics. A merger with the Department of Statistics would be beneficial for Applied Mathematics and, in turn, by increasing the mathematical expertise, for Statistics also.

The current trend towards inclusion rather than fragmentation has motivated the ongoing effort towards removing barriers and artificial divisions between pure and

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