Exit Survey- BS MathEd Mathematics

Please give us your feedback on your studies in the Department of Mathematics and Statistics at UNM. This form has 3 parts. Thank you for your input!

Part 1: Assessing your skills

How well did you achieve each of the following departmental student learning outcomes? Please assess each of the following learning outcomes using this rating scale: 5= Excellent, 2 = Very Good, 3 = Satisfactory, 2 = Questionable, 1 = Unacceptable

A.1 Compute limits and derivatives using their definitions, and use the fundamental theorem of calculus to compute definite and indefinite integrals.

A.2 Effectively perform essential computations in linear algebra, including solving linear systems, computing the eigenvalues of a matrix, and determining linear independence.

A.3 Give precise statements of definitions and theorems, differentiating between hypotheses and conclusions. Construct logical arguments.

B.1 Be able to construct rigorous proofs, including proofs by contradiction, proof by in- duction, and disproving by giving counterexamples.

B.6 Probability and statistical modelling (STAT 345, 445). Be able to solve probability problems, with discrete and continuous univariate random variables and apply the Central Limit Theorem. Demonstrate an understanding of statistical models for standard designed experiments, sample surveys, and observational studies. Be able to understand and apply point estimation, confidence interval and hypothesis testing for a sample.

B.7 Geometry (MATH 306). Be able to show that figures are congruent or similar using transformations. Work fluently with and without coordinates, demonstrating an understanding of the algebra of the Cartesian plane when there are coordinates.

B.8 Algebra (MATH 322). Be able to identify various algebraic structures including groups, rings and fields and use algebraic properties and functions which preserve algebraic properties to write concise algebraic proofs.

C.1 Communicate well, orally and in writing, in an applied mathematics context.

C.2 Demonstrate sufficient preparation for courses in differential equations, numerical analysis, complex analysis, and real analysis at the graduate level.

Part 2: Feedback on your learning

- 1. What aspects of your education helped you with your learning, and why were they helpful?
- 2. Please comment on instruction in your courses: which aspects were helpful, which ones were not?

3. Please comment on homework in your courses: was it sufficient to help your learning? did it prepare you for exams?

- 4. List a highlight of your studies in mathematics and statistics.
- 5. In hindsight, would you have changed the order in which you took certain courses? if so, why?
- 6. Did interactions with your peers inside or outside the classroom contribute to your learning?
- 7. Did you participate in any of the following? Mark all that apply Check all that apply.
 - Independent study course
 - Undergraduate research
 - Undergraduate conference
 - Summer program
 - Internship

8. What might the department change to help you learn more effectively, and what is working well? Please be specific if possible; this is your opportunity to improve the program.

Part 3: Future Plans Please tell us about your plans

1. What are your plans after graduation?

- Employment outside academia
- Teaching K-12
- Teaching certificate
- Professional program (such as Medical or Law School) Graduate School
- Unknown/Other

2. If known, please add specifics to your answer above (company where you will be employed, school at which you will teach, graduate school you will attend, etc)