



UNIVERSITY OF WISCONSIN
WHITEWATER

ACADEMIC ASSESSMENT

ACTUARIAL MATHEMATICS MINOR

MISSION STATEMENT

Throughout history the mathematical sciences have been admired for their intrinsic beauty and interdisciplinary applications that contribute to economic advancement, scientific understanding, and world cultures. Our mission is to create a climate that nurtures curiosity, inspires creativity, promotes collaboration, and drives the learning and expansion of mathematical and statistical knowledge within our university, our profession, and our community.

In support of this mission we are committed to:

- Fostering the personal and professional growth of our students by offering challenging and relevant mathematics and statistics courses through the general education program, specialized and career-oriented majors and minors, and collaborative programs with other departments and colleges.
- Developing innovative pedagogy to promote mathematical and statistical reasoning, thinking and literacy.
- Building a collaborative professional community of faculty, instructional academic staff, and students by supporting scholarship in the mathematical sciences.
- Providing mathematical and statistical assistance to the surrounding community.
- Recruiting and retaining high quality faculty and instructional academic staff.
- Connecting academic knowledge with experiences such as international study, undergraduate research, and internships.
- Maintaining a high level of personal and professional integrity and instilling these ideals in our students.
- Enriching the lives of students, faculty, and the university by sharing the beauty, insights, history, and culture of the mathematical sciences.

STUDENT LEARNING OUTCOMES

Student learning outcomes (SLOs) are statements of what a student will know or be able to do when they have completed a program. They represent the knowledge and skills a program has determined are most important for students to gain from that program. The most useful SLOs are specific and measurable so the program can accurately assess the degree to which students have achieved each outcome, and they align with college and institution mission and values. Data on achievement of SLOs is used to make improvements in the program and increase student success.

Upon completion of the Actuarial Mathematics minor, the student will:

- Acquire the basic skills and conceptual understanding regarding differential, integral and multivariable calculus.
- Demonstrate an understanding of probability and statistical tools and apply these tools to problems encountered by actuaries.
- Understand the fundamentals of interest theory and its applications.
- Communicate actuarial problems and solutions orally and in writing, with precision, clarity and organization, using proper terminology and notation.
- Acquire the necessary skills and knowledge to pass the introductory level Society of Actuaries' exams.

