MATHEMATICS & STATISTICS

Mission Statement
The Department of Mathematics and Statistics strives to provide quality undergraduate and graduate education in Mathematics and Statistics and its applications, and to contribute to the community, region and profession through research and service.

Student Learning Outcomes
UWF Mathematics and Statistics graduates should be able to do the following:

Content
- Recognize and apply principles of abstract mathematics
- Describe and use principles of computational and applied mathematics
- Recognize and use principles of theoretical and applied statistics
- Identify career options related to training in math and statistics

Critical Thinking
- Analyze the essentials of a problem logically
- Choose and execute calculation and manipulation strategies that are relevant to mathematics
- Select and apply appropriate mathematical tools and techniques
- Solve mathematical problems
- Use information technology appropriately to conduct research
- Transfer knowledge from one context to another

Communication
- Write coherent and accurate reports of mathematical processes and problems
- Deliver oral presentations that explain math concepts or defend mathematical arguments effectively and accurately

Integrity/Values
- Recognize ethical components in complex situations
- Analyze complex ethical situations and design appropriate solutions
Project Management
- Work toward solutions with persistence and relatively little guidance
- Manage time and resources effectively
- Collaborate with team members smoothly and effectively

Teaching Skills
- Plan and execute math course activities appropriate for secondary education settings
- Manage classroom dynamics to promote student learning

Assessment of Student Learning Outcomes
Although your work will be evaluated throughout the major, your work will culminate in a proseminar (capstone course) during the senior year. You will conduct research under a faculty’s guidance in one semester. The faculty will choose a topic for the student in mathematics or statistics. You will meet with the faculty regularly to report the progress and seek advice. By the end of the semester, you will give an oral presentation to students and faculty as well as submit a written report based on the research and findings. Both projects give you an opportunity to integrate the skills and knowledge from the program.

Job Prospects for Mathematics & Statistics Majors
Teaching:
Students can find teaching jobs easily in high schools/colleges since math teachers are needed all over the nation.

Service in government and military bases:
Government agencies and military bases employ mathematicians for programming, planning and development services in agriculture, labor, education, and the census.

Service in private sectors:
Private sectors hire mathematicians in management, marketing, engineering, insurance, computer programming, product quality, medicine and pharmaceutical research, medical device research, transportation, insurance, computer and data processing services, and risk assessment.

Supporting roles in the social, biological, and physical sciences

Find Out More about Mathematics & Statistics at UWF: http://uwf.edu/mathstat/