



### **Course Description**

#### **MGF1131 | Mathematics in Context | 3.00 credits**

Through this course, students will experience the practicality of mathematics in a global society. Students will engage in the applications of tools and techniques of mathematics in a variety of contextual situations from everyday life. This course is appropriate for students in a wide range of disciplines/programs. This course must be completed with a grade "C" or better. Computational course.

### **Course Competencies**

**Competency 1:** The student will apply mathematical models to civically contextual situations by:

1. Using mathematics in civically contextualized situations such as voting, graph theory, and financial mathematics.

**Competency 2:** The student will engage in ways of thinking that involve sample size, counting strategies, chance, ratios, and proportions by:

1. Describing sample spaces and events.
2. Calculating probabilities.
3. Using the fundamental counting principle.
4. Calculating combinations and permutations

**Competency 3:** The student will organize, visualize, and model data in a meaningful way by:

1. Organizing data.
2. Creating the appropriate graphs from data such as histograms, bar graphs, and pie charts.

**Competency 4:** The student will analyze and interpret representations of data to draw reasonable conclusions by:

1. Interpreting data presented in graphs, charts, and tables.
2. Understanding measures of central tendency and variation.
3. Drawing conclusions from data sets.

### **Learning Outcomes:**

- Solve problems using critical and creative thinking and scientific reasoning
- Use quantitative analytical skills to evaluate and process numerical data