Beauty and Joy of Computing

Course Description: This course presents the history, social implications, great principles, and future of computing. It examines the computing applications that have changed the world and how computing empowers discovery and progress in other fields. The relevance of computing to the student and society will be emphasized. Some students will learn the joy of programming using a friendly, graphical language, and will complete a substantial programming project. The course consists of three lecture hours and, for some students, one two-hour laboratory per week. 3-4 credits. You will also create an e-folio that you will work on throughout the semester and will use in the other CS courses.

Course Objectives: CS 101 helps students establish a base upon which to build towards the longer-term goals of the Computer Science and Cybersecurity programs. The course addresses the following goals and objectives that have been established by the department:

Goal 1: Discipline Specific Learning Students will be able to understand and apply the theoretical tools of computer science to standard problems from the field.

- Students will learn core concepts of the discipline as determined by a nationally recognized professional computer science education organization.
- Students will understand and analyze algorithms written in pseudo-code.
- Students will identify the various components of a computer-based system and explain how they integrate to form a coherent solution. Students will document the components in a style commonly used by software professionals.

Goal 2: Reasoning and Inquiry Skills Students will be able to read, write, and analyze program fragments and complete programs.