ROSLYN HIGH SCHOOL

DEPARTMENT: MATHEMATICS / 21ST CENTURY LEARNING

NAME OF COURSE: AI, CYBER-SECURITY AND BEYOND

GENERAL DESRIPTION OF COURSE

(Prerequisite: AP Computer Science A) This course is designed to be an overview of more advanced topics in computer science. The course will cover different concepts in computer science in broad scope, while utilizing programming skills previously learned. The include Machine Learning, Artificial Intelligence, Data Science, Cyber-Security, Databases, different programming languages and other additional topics depending on student interest and time. These ideas will be investigated through project based learning, as well as formal instruction.

TEXTBOOK: None

GRADING PROCEDURES:

The grade for each of the four marking periods is determined by unit exams, projects, quizzes, reports and timely completion of homework assignments. The student's final average will be determined by averaging the four quarter grades.

REQUIREMENTS:

Students are expected to maintain a set of well-organized notes, participate in class discussions and activities, complete projects in a timely manner and work collaboratively. Regular attendance is also expected and students are to make up work missed due to absences. Other requirements are based on technology. Students will probably need to complete programming tasks at home and should therefore have a home computer or laptop with a Java IDE installed on it. Lessons will require both independent and group work and work will be submitted electronically. As in all classes, respect must be shown to all individuals.