



**GOVERNING BOARD AGENDA ITEM
AMPHITHEATER UNIFIED SCHOOL DISTRICT NO. 10**

DATE OF MEETING: **June 9, 2015**

TITLE: **Approval of New Course for Middle School Computer Science (Coding)**

BACKGROUND:

It is projected that there will be a significant increase in mathematical and computer related jobs over the next decade. We have expanded Math, Science and computer offerings at our high schools in recent years. In order to prepare our students and to peak interest in these courses we need to offer similar courses to students during middle school. The concepts learned in middle school will be aligned with our high school Math, CTE, and STEM courses.

Students in grades 6 - 8 will learn programming fundamentals through a fun, engaging, and creative curriculum. Students will use critical and computational thinking while they create hands-on projects that will challenge them to create an Ohm's law simulator, draw intricate patterns, program sprites to mimic line-following robots, and create arcade-style games. Students will learn to:

- Design software programs to solve a variety of projects or problems.
- Logically organize and analyze data.
- Harness the power of repeat loops and recursion.
- Use if/else statements and logical operators to make decisions.
- Store data in variables and lists to use later in your program.
- Read, store, and manipulate user input.
- Implement key computer science algorithms like a linear search and bubble sort.

RECOMMENDATION:

The Administration recommends the Governing Board approve the new course.

INITIATED BY:

Monica Nelson, Associate Superintendent

Date: May 28, 2015

Patrick Nelson, Superintendent