GOVERNING BOARD AGENDA ITEM
AMPHITHEATER UNIFIED SCHOOL DISTRICT NO. 10

DATE OF MEETING: June 11, 2019

TITLE: Approval of Amphitheater High School 2019-2020 Dual Enrollment Courses

BACKGROUND:

Pima Community College (PCC) has approved the following courses for Dual Enrollment. These courses will be offered at Amphitheater High School. A number of these courses are directly connected to our JTED/CTE course offerings.

Game Design I -Textual analysis of game play. Includes history of games, defining play, use of rules, impact of game on culture, psychological impact of games, and working in the game industry. Upon successful completion of this course, the student will be able to:

1. Discuss the history of games, computers, and electronic games
2. Describe the different types of play
3. Describe the meaning and reasons for rules
4. Demonstrate the formal elements of game design
5. Discuss the impact of games on culture
6. Discuss the role of the game designer
7. Discuss the psychological impact of games
8. Discuss working in the game industry and the job categories

Introduction to Game Programming - Introduction to game engine programming. Includes Unity game engine, C# language features, input interaction, object-oriented programming, using bitmaps, a particle engine, and integrating 3D models. Upon successful completion of this course, the student will be able to:

1. Discuss Unity game engine features
2. Move game objects in space over time
3. Choreograph physical and logical interactions between objects
4. Apply object oriented programming principles to games
5. Control user input and provide proper game responses to input
6. Read an API
7. Build a resolution-independent UI
8. Use a particle engine
9. Create a complete 2D game
10. Understand how to tailor 3D models and UV maps for game engines

Programming and Problem Solving I - Introduction to personal and business computer systems. Includes components of a computer system; advantages and disadvantages of programming languages; traditional languages, native code and object-oriented concepts; source code versus executable code; and data structures and data representation. Also includes language statements; expressions components; control structures; problem-solving techniques; program test data, debugging and termination; and solving simple problems and creating programs using C#, Python, or Java.

Upon successful completion of the course, the student will be able to:

1. Demonstrate the ability to create correct if-then-else and case control structures
2. Demonstrate the ability to create correct repetition structures
3. Demonstrate the ability to use arrays/lists in programs
4. Create test cases and debug programs
5. Create modular programs, using parameter passing, to solve problems using C#, Python, or Java
6. Demonstrate the ability to use object-oriented concepts such as encapsulation, constructors, methods, and properties

Automotive Maintenance - Techniques of routine vehicle maintenance. Includes customer vehicle identification and handling, new vehicle pre-delivery inspection and preparation, safety inspection, lubrication tasks, light line tasks, and fluid flushing.
Upon successful completion of the course, the student will be able to:

1. Perform a pre-delivery inspection on a typical vehicle
2. Perform an engine oil and filter change on a typical vehicle
3. Perform an automatic transmission/transaxle fluid and filter change on a typical vehicle
4. Perform a fluid change on a standard transmission/transaxle, differential and transfer case
5. Perform a coolant drain/fill, and hoses, wipers, and belts removal and replacement
6. Perform a tire rotation

Light Line Maintenance – Principles and procedures for light line service. Includes safety, transmission and driveline systems, air conditioning/heating systems, electrical systems, suspension/steering systems, engine performance, and tools and equipment.
Upon successful completion of the course, the student will be able to:

1. Perform engine checks and repairs of cooling and exhaust systems
2. Perform and diagnose starting/charging and lighting systems
3. Demonstrate the removal/replacement of a timing belt
4. Demonstrate the removal/replacement of a rear wheel drive axle
5. Demonstrate the removal/replacement of a front wheel drive axle
6. Demonstrate proper use of automotive air tools and torque wrenches
7. Demonstrate the removal/replacement of a timing chain, fuel filter and adjustment of valves
8. Demonstrate the removal/replacement of a water pump and perform pressure tests

Introduction to Western Civilization I – Pre-history to the Wars of Religion, a period extending from 10,000 BCE to 1648 CE. Includes transition from pre-historic to the historic period, Greco-Roman world, Early, Central, and Late Middle Ages, and Renaissance and Reformation.
Upon successful completion of the course, the student will be able to:

1. Describe the transition from the pre-historic era to the historic era
2. Examine the features of the Greco-Roman world
3. Describe the Early Middle Ages
4. Analyze aspects of the Central Middle Ages
5. Describe the events of the Late Middle Ages
6. State developments of the Renaissance and Reformation

Introduction to Western Civilization II – History of the origins and development of the modern Western world. Includes Wars of Religion, the Enlightenment, the Eighteenth century, the Nineteenth century, and the Twentieth century.
Upon successful completion of the course, the student will be able to:

1. Examine the causes and results of the Wars of Religion
2. State the developments and characteristics of the Enlightenment and the Eighteenth century
3. Describe the aspects of the Nineteenth century
4. Examine the era of the Twentieth century

History of the United States I- Survey of the major developments in American history from the Columbian voyages to the Era of Reconstruction. Includes Colonial America, the Formative Years - 1776-1815, the Early National Period - 1815-1850, and the coming of the Civil War and its aftermath. Also includes the social, intellectual, and political aspects of early American life.
Upon successful completion of the course, the student will be able to:

1. Discuss the evolution of American society and institutions from Pre-Columbian to Colonial times
2. Discuss the shaping and establishing of American political institutions
3. Evaluate the rise of American federal power and "Manifest Destiny"
4. Analyze the North/South dichotomy and the Civil War

History of the United States II- Survey of the major developments in American history from era of Reconstruction to the present. Includes the era of Reconstruction, the emergence of modern America, the Early

20th Century, and America as a world power. Also includes the social, intellectual, and political aspects of contemporary American life.

Upon successful completion of the course, the student will be able to:

1. Discuss the American society from the Era of Reconstruction to the emergence of modern America
2. Discuss the social and political movements of the 20th century
3. Explore the concept of America as a world power

RECOMMENDATION:

This item is presented for the Board's approval.

INITIATED BY:

Michael Bejarano **Date: May 31, 2019**
Associate Superintendent for Secondary Education

Todd A. Jaeger, J.D., Superintendent