



COURSE SYLLABUS

Programs in Technology Education

General H.H. Arnold High School

I. COURSE NUMBER AND TITLE: **TES301, Computer Animation**

II. CREDIT: 2 Semesters

III. PREREQUISITE: Engineering Drawing, Industrial Design, or Architectural Design

IV. COURSE DESCRIPTION: The Studio Production course is designed for continuing students of Computer Aided Design (CAD). Students learn the fundamentals of studio production using computers as well as audio and video recording techniques. Using analog and digital equipment, as well as computer software, the student will learn audio, video, animation, morphing, and 3D graphic techniques. Emphasis will be placed on the effective use of multimedia to convey a message. Concepts and application of story boarding, editing, and production will carry students through the project based curriculum. Students progress at their own pace while studying and completing tasks independently. Hands-on activities and design and production projects, supplemented with demonstrations and lectures familiarize students with what is considered to be the language of the communications industry. This course is highly recommended for those students aspiring to be studio technicians, video game engineers, animators, and engineers.

V. COURSE OBJECTIVES:

Upon completion of this course, students should be able to

1. Maintain safety awareness in the laboratory.
2. Research the evolutionary development of audio and video program production.
3. Investigate methods of producing, transmitting, storing, and using data.
4. Demonstrate the use of computer applications relating to audio and video production.
5. Demonstrate the use of analog, digital audio and video production equipment.
6. Design appropriate sets for studio productions.
7. Author productions using creative ideas and techniques.
8. Create productions using audio and video equipment.
9. Demonstrate skills in producing, directing, taping, performing, and editing a studio production.

VI. COURSE OUTLINE

1. 3D Computer Graphic Design
2. 3D Computer Animation
3. Analog and Digital Audio Recording, Editing, and Production
4. Analog and Digital Video Recording, Editing, and Production
5. Still Frame Animation
6. Digital Morphing
7. Multimedia Production
8. Video Production Project
9. Studio Production Project

VII. CURRENT TEXTS:

3D Studio Max Fundamentals
By Michael Todd Peterson

3D Studio Max Tutorials
By Autodesk Press

3D Studio Max
Tutorials From the Masters
By Michael Bousquet

VIII. PREPARED: August 25, 2002