

## VALLEY ROP COURSE OUTLINE

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| <b>COURSE TITLE:</b> | <b>Digital Animation 2</b>                 |            |
| <b>VALLEY ROP #:</b> | AME-5711-DigAni2                           |            |
| <b>CDE #:</b>        | 1561                                       |            |
| <b>CBEDS TITLE:</b>  | Digital Animation                          |            |
| <b>CBEDS #:</b>      | 5711                                       |            |
| <b>CTE SECTOR:</b>   | Arts, Media & Entertainment                |            |
| <b>CTE PATHWAYS:</b> | Media & Design Arts                        |            |
| <b>JOB TITLES:</b>   | Multimedia Artists & Animators             | 27-1014.00 |
|                      | Cartoonist                                 |            |
|                      | Cartoonist, Motion Pictures                |            |
|                      | Graphic Designer                           | 27-1024.00 |
|                      | Fine Arts:Painters, Sculptor & Illustrator | 27-1013.00 |

### **COURSE DESCRIPTION:**

Students will generate art through the use of advanced computer techniques and animation projects. They will draw in one and two point perspectives, animate body expression, create texture maps, research related careers, and script simple video games. By the end of the course, students will create a portfolio with examples of their work on CD.

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| <b>DATE APPROVED:</b>       | March 9, 2004  |
| <b>REVISED DATE(S):</b>     | December 12, 2008 /March 2009/Oct 2009   |
| <b>HOURS:</b>               | 180 per year   |
| <b>CREDITS:</b>             | 10 per year  |
| <b>PREREQUISITES:</b>       | Completion of Digital Animation with a grade of A, B, Or Instructor Approval.  |
| <b>GRADE LEVEL:</b>         | 11-12  |
| <b>ARTICULATION(S):</b>     | None   |
| <b>TEXTBOOKS/RESOURCES:</b> | Computer, art, and animation texts; Magazines-3D Design, Computer Graphics World; Videos- <i>Jurassic Park</i> , <i>Toy Story</i> , <i>Chuck Jones</i> , <i>a Life in Animation</i> , <i>Cinema Secrets</i> , <i>A Bug's Life</i> , <i>Monsters, Inc.</i> Software-Macromedia Flash, 3D Studio Max, Poser, Adobe Photoshop, Premiere |

**COURSE COMPETENCIES:**

Upon completion of this course, the student will:

- Draw in one-point perspective.
- Draw in two-point perspectives.
- Draw body expressions.
- Create texture maps.
- Link the cursor to an object.
- Import and manipulate digital photographs.
- Create particle systems.
- Design objects with lofting.
- Design objects with nurbs.
- Create rendering effects.
- Search for career opportunities.
- Assemble a portfolio on compact disk (CD).
- Script simple video games.

**INSTRUCTIONAL METHODS:**

- Individual/group instruction
- Cooperative learning
- Current textbooks and technology
- Demonstrations
- Field trips
- Speakers

**EVALUATION METHODS:**

Assessment opportunities, which allow continuous evaluation of students' progress, will be embedded throughout the course and should be a learning experience. All students will be expected to achieve mastery of all topics; often, demonstrations of mastery will occur in a public forum. The following strategies, which include both formal and informal assessment techniques will include, but are not limited to:

- CD Portfolio
- Classroom participation
- Completion of required assignments/portfolio
- Individual and group projects
- Industry-related tests
- Punctuality and attendance

## COURSE OUTLINE:

| <b>Unit of Instruction</b>  | <b>Estimated Hours</b> |
|---|------------------------|
| <b>Classroom Orientation</b>  | <b>2.5</b>             |
| <ul style="list-style-type: none"><li>• Computer room rules of conduct</li><li>• Federal and district copyright laws</li><li>• Internet use policy (to be signed by students)</li></ul>   |                        |
| <b>Art Fundamentals</b>   | <b>30</b>              |
| <ul style="list-style-type: none"><li>• Draw one- and two-point perspectives</li><li>• Draw facial and body expressions</li><li>• Discuss aesthetics and animators</li></ul>  |                        |
| <b>2D Animation</b>   | <b>50</b>              |
| <ul style="list-style-type: none"><li>• Animate body expression</li><li>• Link cursor to object</li><li>• Script simple video games</li></ul>   |                        |
| <b>3D Animation</b>   | <b>50</b>              |
| <ul style="list-style-type: none"><li>• Create texture maps</li><li>• Import digital camera images</li><li>• Create complex lighting and camera angles</li><li>• Create particle systems</li><li>• Design objects with lofting</li><li>• Design objects with nurbs</li><li>• Create rendering effects</li><li>• Burn portfolio on compact disk (CD)</li></ul> |                        |
| <b>Computer Hardware</b>  | <b>15</b>              |
| <ul style="list-style-type: none"><li>• Parts, care, and handling</li><li>• Basic operations</li><li>• Disk operating system operations</li><li>• Use of the Network</li><li>• Use of the Internet</li></ul>  |                        |
| <b>Final Animation Project</b>  | <b>22.5</b>            |
| <ul style="list-style-type: none"><li>• Advanced drawing</li><li>• Specified number of frames</li><li>• Storyboard</li><li>• Completed project/presentation</li></ul>   |                        |
| <b>CD Portfolio development</b>   | <b>10</b>              |
| <b>Total Hours</b>  | <b>180 Total Hours</b> |

**Standards:** 1.1 1.2. 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, 5.3, 5.4

## **CAREER PREPARATION STANDARDS:**

- A. **PERSONAL SKILLS** - Students will understand how personal skill development affects their employability. This skill includes positive attitudes, self-confidence, honesty, responsibility, initiative, self-discipline, personal hygiene, time management, and the capacity for lifelong learning.
1. Demonstrate an understanding of classroom policies and procedures.
  2. Discuss importance of the following personal skills in the business environment:
    - a. positive attitude
    - b. self-confidence
    - c. honesty
    - d. perseverance
    - e. self-management/work ethic
    - f. pride in product/work
    - g. dependability
  3. Identify acceptable work attire.
  4. Establish goals for self-improvement and further education/training.
  5. Prioritize tasks and meet deadlines.
  6. Understand the importance of initiative and leadership.
  7. Understand the importance of lifelong learning in a world of constantly changing technology.
- B. **INTERPERSONAL SKILLS** - Students will understand key concepts on group dynamics, conflict resolution, and negotiation. This skill includes the ability to work cooperatively, accept supervision, assume leadership roles, and show respect for others. This standard includes an understanding of sexual harassment laws and an appreciation of cultural diversity in the workplace.
1. Identify and discuss behaviors of an effective team.
  2. Explain the central importance of mutual respect in the workplace relations.
  3. Discuss and demonstrate strategies for conflict resolution and negotiation, and explain their importance within the business environment.
  4. Understand laws that apply to sexual harassment in the workplace, and identify tactics for handling harassment situations.
  5. Work cooperatively, share responsibilities, accept supervision and assume leadership roles.
  6. Demonstrate cooperative working relationships and proper etiquette across gender and cultural groups.
- C. **THINKING AND PROBLEM-SOLVING SKILLS** - Students will exhibit critical and creative thinking skills, logical reasoning, and problem-solving. These skills include applying basic skills in order to calculate, estimate, measure; identify, locate, and organize information/data; interpret and follow directions from manuals, labels, and other sources; analyze and evaluate information and solutions.
1. Recognize the importance of good academic skills and implement a plan for self-improvement as needed.
  2. Read, write, and give directions.
  3. Exhibit critical and creative thinking skills and logical reasoning skills, and employ these skills for problem solving.
    - a. Work as a team member in solving problems.
    - b. Diagnose the problem, its urgency, and its causes.
    - c. Identify alternatives and their consequences.
    - d. Explore possible solutions.
    - e. Compare/contrast the advantages and disadvantages of alternatives.
    - f. Determine appropriate action(s).
    - g. Implement action(s).

- h. Evaluate results of action(s) taken.
- D. **COMMUNICATION SKILLS** - Students will understand principles of effective communication. This standard includes effective oral and written communication, listening skills, following and giving directions, requesting and giving information, asking questions.
- 1. Use communication concepts in application of skills, techniques, and operations.
    - a) Prepare written material.
    - b) Analyze written material.
  - 2. Understand and implement written instructions, from technical manuals, written communications, and reference books.
  - 3. Present a positive image through verbal and nonverbal communication, and understand the power of body language in communication.
  - 4. Demonstrate active listening through oral and written feedback.
  - 5. Give and receive feedback.
  - 6. Demonstrate assertive communications (both oral and written).
  - 7. Demonstrate proper etiquette in workplace communications, including an awareness of requisites for international communications (languages, customs, time zones, currency and exchange rates).
  - 8. Demonstrate writing/editing skills as follows:
    - a) Write, proofread, and edit work.
    - b) Use correct grammar, punctuation, capitalization, vocabulary, and spelling.
    - c) Select and use appropriate forms of technology for communication.
  - 9. Exhibit a proficiency in the use of reference books.
  - 10. Research, compose, and orally present information for a variety of business situations utilizing appropriate technology.
- E. **OCCUPATIONAL SAFETY** - Students will understand occupational safety issues, including the avoidance of physical hazards in the work environment. This includes the safe operation of equipment, proper handling of hazardous materials, appropriate attire and safety accessories, avoidance of physical injuries, interpretation of warning and hazard signs and terminology, and following and understanding safety-related directions.
- 1. Discuss and implement good safety practices, including the following (if applicable to course):
    - a. personal
    - b. lab
    - c. fire
    - d. electrical
    - e. equipment
    - f. tools
    - g. interpretation of Material Safety Data Sheets (MSDSs)
    - h. Environmental Protection Agency (EPA)
    - i. Occupational Safety and Health Administration (OSHA)
    - j. American Red Cross Standards (ARC)
    - k. Networking Safety Standards
  - 2. Apply sound ergonomic principles in organizing one's work space.
- F. **EMPLOYMENT LITERACY** - Students will understand career paths and strategies for obtaining employment within their chosen field. This includes traditional job preparation skills, such as resumes, application forms, cover letters, sources of employment information, and interviewing skills, but also includes an overview of the industry and an understanding of labor market trends.
- 1. Explore career opportunities and projected trends; investigate required education, training and experience; and develop an individual education plan.
  - 2. Identify steps for setting goals and writing personal goals and objectives.

3. Examine aptitudes related to career options; relate personal characteristics and interests to educational and occupational opportunities.
4. Develop a career portfolio, including the following documents:
  - a. job application
  - b. resume(s)
  - c. appropriate cover and follow-up correspondence
5. Identify and demonstrate effective interviewing techniques.
- G. **TECHNOLOGY LITERACY** - Students will understand and adapt to changing technology by identifying, learning, and applying new skills to improve job performance. Students should understand the role of technology in their chosen field and should be able to use all appropriate technology. Students should also feel confident in their ability to learn new technology by generalizing from what they know, adapting skills to new situations, and identifying and using sources of information and of further learning.
  1. Demonstrate the ability to use personal computers for loading and retrieving data, information gathering, measurements, and writing.
  2. Identify the characteristics and explain the importance of adapting to changes, being flexible, and evaluating goals when working in the industry.
  3. Understand the importance of lifelong learning in adapting to changing technology.
- H. **IMPORTANCE OF ETHICS** – Students will understand proper ethics in the workplace.
  1. Discuss social and ethical responsibilities in the industry.
  2. Demonstrate ethical choices in workplace situations.