

**SEACOAST SCHOOL OF TECHNOLOGY**  
**Student Competency Profile**  
**Digital Media Arts – CIP 090702**

**Student:** \_\_\_\_\_

**YOG/Completed Program:**

\_\_\_\_\_  
 Kristine Groleau, Instructor

\_\_\_\_\_  
 Margaret E. Callahan, Principal

**Technical Competencies & Performance Indicators**

<b>Understand design thinking (the process of envisioning, sketching and documenting ideas and messages) which is the foundation of all digital communications.</b>	
1.	Demonstrate the ability to develop a clear message.
2.	Break down complicated concepts into its most essential parts for effective communication.
3.	Clearly present an idea.
4.	Show the ability to collaborate on a common theme.
5.	Demonstrate the ability to design individually and as a team.
6.	Explain the general principles for user interface designs.
7.	Navigate through on-line resources directly related to media arts, design and communications.
8.	Evaluate a variety of creative work through collaborative participation and engagement.
9.	Demonstrate the use of work stations, networks, peripherals, storage and input/output devices.

<b>Understand the fundamentals of computer graphics and how graphics workstations, hardware, and software are used to aid the graphic artist in the creation and modification of production quality computer graphics.</b>	
15.	Demonstrate the use of vector drawing tools including selections, color and gradients, and complex path operations.
16.	Demonstrate the ability to work with bitmapped image editing tools including layers, selection, channels, and filters.

<b>Understand the methods and dynamics involved in developing both 2D and 3D computer animation in order to create comprehensive and dynamic animations.</b>	
17.	Discuss/explain the effective planning and sequencing of object movement along the animation timeline to effectively tell a story.
18.	Demonstrate the fundamentals of positioning 3D objects in time and space contexts.

<b>Understand the legal, ethical and social responsibility aspects of digital communications to abide by its laws and regulations.</b>	
10.	Explain the laws and regulations governing information gathering and media production.
11.	Identify the influence of digital communication on individuals and society.
12.	Discuss and be aware of ethics and regulatory policies of businesses in the industry.

<b>Understand the methods and dynamics involved in 3D environments in order to create realistic 3D worlds.</b>	
19.	Demonstrate creating 3D objects from simple primitives, the use of textures and their properties as applied to a 3D surface, Boolean operations and transformations (scaling and rotation) of 3D objects.
20.	Demonstrate the ability to complete the following in a 3D space: place, import and transform 3D objects, manipulation of camera properties and positioning.
21.	Demonstrate the ability to apply digital lighting systems.
22.	Demonstrate the ability to render a scene to desired output.

<b>Understand the design principles and elements used in the development of design products.</b>	
13.	Demonstrate the uses of design elements; shape, space, line, size, color, texture, and typography in a design composition..
14.	Discuss and demonstrate how the primary and support principles of unity, variety, hierarchy, proportion, scale, balance, proximity, rhythm, and repetition affect the design composition and visual language as a whole.

<b>Understand the methods and dynamics critical to the production of a website.</b>	
23.	Demonstrate the use of a variety of elements (text, typography, still images and motion graphics) to compose one or more web pages.

24. Demonstrate and explain interaction design and placement, sequence of movement and storytelling.
25. Demonstrate and explain the principles of using current Cascading Style Sheets (CSS).
26. Demonstrate and explain the use of the principles behind web content management tools to control and manage a web property.
27. Demonstrate the effective use of industry-standard mark-up and other coding languages.

41. Decision-Making & Problem-Solving - Demonstrate and apply good decision-making and problem-solving skills by outlining issues in situations/problems and determining, collecting, and organizing information needed in order to formulate a solution.
42. Self-Management - Demonstrate and apply self-management skills by adhering to regulations, being responsible, and following through on commitments.
43. Communication Skills - Demonstrate and apply effective communication skills: verbal, written, visual, and listening.
44. Ability to Work with Others - Demonstrate and apply the necessary skills in order to work effectively with others.
45. Information Use – Research, Analysis & Technology - Demonstrate and apply the use of information through research, analysis, and technology.
46. Mathematical Concepts - Demonstrate mathematical and computation skills as applied to real world situations.
47. General Safety: Demonstrate and apply safe practices and procedures in the workplace.
48. Career Development - Demonstrate personal/career development skills by completing a career plan.

<b>Understand the methods and dynamics critical to video production.</b>	
28. Discuss, explain and demonstrate the use of storyboarding and other pre-visualization process of pre-production.	
29. Discuss and demonstrate basic camera techniques.	
30. Discuss and demonstrate the concept of continuity through the utilization of A Roll and B Roll and other methods of timeline editing.	
31. Discuss and demonstrate the use of natural and studio lighting in video production.	
32. Discuss and demonstrate the effective use of a digital and still video camera.	
33. Discuss and demonstrate the post-production process (editing, input and output, clip management, storage, etc.).	
34. Demonstrate the ability to input scene transitions and motion graphics to a video production.	
35. Discuss and demonstrate the effective use of video delivery methods including compression and output options.	

<b>Understand the fundamental concepts of entrepreneurship and how entrepreneurship influences the economy.</b>	
36. Discuss and assess venture creation possibilities and identify the steps in planning the venture.	
37. Identify the resources needed for venture startup and operation.	
38. Discuss the options in planning the venture's future (growth, development, demise).	
39. Identify and discuss the traits and behaviors of an entrepreneur (leadership, personal assessment, personal management).	

<b>Understand the importance of personal growth and leadership to enhance career success</b>	
40. Demonstrate personal growth, community leadership, democratic principles and social responsibility by participating in activities/events offered through student organizations.	

**Rating Scale**

1. No Exposure
2. Novice – Learner requires significant supervision.
3. Proficient – Learner demonstrates skills regularly.
4. Mastery – Learner demonstrates skills numerous times without supervision

**Career Ready Practices (CRP)**

1. Demonstrate creativity and innovation.
2. Model integrity, ethical leadership and effective management.
3. Attend to personal health and financial well-being.
4. Consider the environmental, social and economic impacts of decisions.
5. Act as a responsible and contributing citizen and employee.
6. Communicate clearly, effectively, and with reason.
7. Apply appropriate academic and technical skills.
8. Employ valid and reliable research strategies.
9. Use technology to enhance productivity.
10. Work productively in teams while using cultural/global awareness.
11. Utilize critical thinking to make sense of problems and persevere in solving them.
12. Plan education and career path aligned to personal growth.