DEGREES, CERTIFICATES, AND TRANSFER PREPARATION INFORMATION

ART – NONCREDIT

Programs Offered
- Noncredit Certificates of Completion
  - Create Space: 3-D Design Output
  - Create Space: Digital Fabric Tools
  - Create Space: Laser Cutting and Engraving
  - Create Space: Print Shop Tools
  - Create Space: Wood Shop

Certificate of Completion Requirements
Satisfactory completion of each of the courses in the Area of Emphasis.

Catalog Rights
A student may satisfy the requirements of a degree that were in effect at any time of the student's **continuous** enrollment. Continuous enrollment means attendance in at least one semester (Fall or Spring) in each academic year.

Create Space: 3-D Design Output, Noncredit Certificate of Completion

Students in this program will develop digital design and manufacturing skills, and technology-oriented content knowledge which will support expanded work opportunities. This certificate is also a gateway into other noncredit and credit programs, helping students develop foundational skills that will prepare them for more intensive programs of study and work opportunities. There are no prerequisite requirements for this program and courses are open to all students.

Program Learning Outcomes: Upon completion of the program, students will Identify the processes and tools involved in digital prototyping and manufacturing. They will Identify materials and methods of fabrication and assess current and potential impact of digital manufacturing.

Area of Emphasis: (0 units)
Required Core Courses: (0 units)
ART 900, Introduction to Create Space Equipment and Materials (0)
ART 902, 3D Design Output (0)

Create Space: Digital Fabric Tools, Noncredit Certificate of Completion

Digital fabrication is the process of translating a digital design developed on a computer into a physical object using a variety of techniques, equipment, materials and production processes. Students completing the Digital Fabrication certificate will develop experience with design, development and production of physical objects, using a combination of hardware and software.

Program Learning Outcomes: Upon completion of the program, students will demonstrate their knowledge and utilization of a variety of tools to create, modify, adapt and prepare files for production using digital fabrication technologies, including 3D printing, laser cutting, and Computer Numerical Control (CNC) milling.

Area of Emphasis: (0 units)
Required Core Courses: (0 units)
ART 900, Introduction to Create Space Equipment and Materials (0)
ART 910, Introduction to Digital Fabric Tools (0)

Create Space: Laser Cutting and Engraving, Noncredit Certificate of Completion

This noncredit Certificate of Completion in Laser Cutting and Engraving is designed to help students develop a foundation in design thinking with a specialization in laser cutting and engraving. Students who complete this program of study will gain advanced problem-solving skills, knowledge of industry standard computer programs, leadership and team building opportunities, and hands-on experience working in a MakerSpace with advanced technologies.

Program Learning Outcomes: Upon completion of the program, students will demonstrate proficiency in operating laser cutting and engraving machines, including setting up, calibrating, and adjusting the equipment for various materials and desired outcomes. Students will understand different materials that can be cut or engraved using lasers, such as wood, acrylic, metal, glass, and fabric. This includes knowledge of how different materials react to laser cutting and engraving and how to select appropriate settings. Students will learn skills in preparing digital files for laser processing, including creating vector graphics, using design software, and ensuring that files are formatted correctly for the laser cutter. Students will develop confidence in managing laser cutting and engraving projects from concept to completion, including planning, setting up, executing, and finishing projects while meeting deadlines and client specifications.

Area of Emphasis: (0 units)
Required Core Courses: (0 units)
ART 900, Introduction to Create Space Equipment and Materials (0)
ART 904, Laser Cutting & Engraving (0)

Create Space: Print Shop Tools, Noncredit Certificate of Completion

This course will be an introduction to the use of digital tools commonly found in a print shop that are used for art and industry including: vinyl printer, large format printing and mounting, and heat transfer printing. Students will utilize existing files and format them to print on a variety of materials including vinyl, paper and fabric. This course is for those who have designs and ideas and want to learn how to use print shop tools to implement them and those who want to work in this growing area of custom consumer products.

Program Learning Outcomes: Upon completing a Print Shop Tools certificate, students will demonstrate a range of practical and technical skills. 1) Tool Operation: Proficiency in operating various print shop tools and equipment, such as presses, cutters, laminators, and binding machines. This includes understanding how to set up, adjust, and maintain these tools for optimal performance. 2) Print Media Handling: Ability to handle different types of print media, including paper, cardstock, vinyl, and specialty materials. This involves understanding how to select appropriate media for different printing processes. 3) Printing Techniques: Knowledge of various printing techniques, such as offset printing, digital printing, screen printing, and letterpress. Students should be able to choose and apply the

right technique for different projects. 4) Prepress Processes: Skills in preparing files and materials for printing, including file setup, proofing, and troubleshooting common issues related to prepress procedures. 5) Color Management: Understanding of color theory and color management techniques, including calibration of printers and monitors, and ensuring color accuracy and consistency across different print jobs. 6) Design Integration: Ability to work with design software and integrate design elements into print-ready formats.

Area of Emphasis: (0 units)
Required Core Courses: (0 units)
ART 900, Introduction to Create Space Equipment and Materials (0)
ART 906, Print Shop Tools (0)

Create Space: Wood Shop, Noncredit Certificate of Completion

The Wood Shop Tools Certificate Program is designed to provide students with comprehensive training in the use and maintenance of essential woodworking tools and machinery. This program equips students with the practical skills and knowledge needed to safely and effectively create high-quality wood products. The courses combine hands-on experience with theoretical instruction, preparing students for various roles in woodworking and related industries.

Program Learning Outcomes: Upon completion of the Wood Shop Tools Certificate Program, students will be able to: Operate a range of woodworking tools and machinery with proficiency. Apply various woodworking techniques to achieve precise and high-quality results. Select and handle different types of wood and materials appropriately. Read and interpret woodworking plans and blueprints for accurate project execution. Implement safety protocols to ensure a safe working environment. Perform routine maintenance and minor repairs on woodworking tools. Apply finishing techniques to enhance the appearance and durability of wood projects. Manage woodworking projects from initial design to final completion.

Area of Emphasis: (0 units)
Required Core Courses: (0 units)
ART 900, Introduction to Create Space Equipment and Materials (0)
ART 920, Wood Shop (0)