Interdisciplinary Studies

INDIS

MAKR

Degree

A.A. – Environmental Literacy

A.A. – Interdisciplinary Studies: Arts and Humanities

A.A. – Interdisciplinary Studies: Math and Science

A.A. – Interdisciplinary Studies: Social and Behavioral Sciences

Coursework:

Modern Making

New Courses

MAKR 140  Introduction to Making  2 Units
Prerequisite: None.
Hours: 18 hours LEC; 54 hours LAB
This highly immersive, hands-on introductory survey course introduces students to the principles of making and design thinking through fabricating or producing a finished product. Students learn to design and build physical things or spaces, make them work, and integrate them with electronics, software, or mediums of innovation. Students will gain knowledge of common fabrication techniques and skill using the associated tools, such as: 3D printing, CNC (Computer Numerical Control) machining, laser cutting, woodworking and metalworking, large printer and cutter usage, electronics, microcontroller programming, textile making, weaving looms, food and beverage making and processing, and more. Students will use this knowledge and skill in both individual and team settings, and participate in a capstone project. Supplies are provided for all assigned projects. Students who have taken this course as MAKR 299 are not eligible to enroll in this course.

MAKR 151  Makerspace Lab I  .5 – 1.0 Units
Prerequisite: None.
Hours: 54 hours LAB
This lab course provides access to workshops in the methodologies and practices of making in a contemporary Makerspace / fabrication laboratory environment. Via hands-on trainings, workshops, and instruction, students will gain experience using a variety of equipment used in the Makerspace to design and build projects using materials and equipment such as wood, plastics, metals, textiles, organic matter, 3D printing, milling, electronics, large format printing, sewing machines, looms, and food and beverage processors. Supplies are provided for all training projects for this course but not for larger scale commercial projects. Students have access to all equipment after completing the required safety training and any relevant workshops. Students who have taken this course as MAKR 299 are not eligible to enroll in this course.

MAKR 152  Makerspace Lab II  1 Unit
Prerequisite: MAKR 151 (Makerspace Lab) or 151 (Makerspace Lab I) with a grade of “C” or better
Hours: 54 hours LAB
This lab course provides access to intermediate-level workshops in the methodologies and practices of making in a contemporary Makerspace / fabrication laboratory environment. Via hands-on trainings, workshops, and instruction, students will gain experience using a variety of equipment used in the Makerspace to design and build projects using materials and equipment such as wood, plastics, metals, textiles, organic matter, 3D printing, milling, electronics, large format printing, sewing machines, looms, and food and beverage processors. Supplies are provided for all training projects for this course but not for larger scale commercial projects. Students have intermediate-level access to all equipment after completing the required safety training and any relevant workshops.

MAKR 153  Makerspace Lab III  1 Unit
Prerequisite: MAKR 152 (Makerspace Lab II) with a grade of “C” or better
Hours: 54 hours LAB
This lab course provides access to advanced-level workshops in the methodologies and practices of making in a contemporary Makerspace / fabrication laboratory environment. Via hands-on trainings, workshops, and instruction, students will gain experience using a variety of equipment used in the Makerspace to design and build projects using materials and equipment such as wood, plastics, metals, textiles, organic matter, 3D printing, milling, electronics, large format printing, sewing machines, looms, and food and beverage processors. Supplies are provided for all training projects for this course but not for larger scale commercial projects. Students have advanced-level access to all equipment after completing the required safety training and any relevant workshops.

MAKR 295  Independent Studies  1 – 3 Units
in Modern Making
Prerequisite: None.
Hours: 54 – 162 hours LAB
This course involves an individual student or small groups of students in study, research, or activities beyond the scope of regularly offered courses, pursuant to an agreement among college, faculty members, and students. Independent Studies in Making offers students a chance to do research and/or experimentation that is more typical of advanced studies in digital fabrication and making.