

3RDWARD INTRO TO PLASTICS SYLLABUS

ALTERNATIVE MATERIALS FOR JEWELRY: INTRODUCTION TO PLASTICS

Project(s): Acrylic/Resin carving, heat forming, simple silicone mold, casting resin, polishing plastic

Level: Introductory

Prerequisite: None

Description: This workshop will cover all the basics of working with the two most commonly used plastics in contemporary jewelry: acrylic and epoxy resin. In the first session students will learn about the history of acrylic, how to cut, drill, carve, and join pieces of acrylic, and make a simple silicone mold for casting resin. In the second session students will learn about the history of resin, how to mix resin, how to trap an object in resin, and how to pigment resin. In the third session students will learn how to finish and polish plastics, discuss other processes such as laser cutting, and learn where these other processes can be done. Each student will leave with one acrylic object, two resin castings, a silicone mold, and the knowledge of how to repeat these processes at home. Plastics provide an affordable alternative to metal with amazing creative potential- come and explore what plastics can do!

Materials

Kit Items:

Safety goggles, sheet acrylic, acrylic rod, saw blades for wax, sand paper

Shared Materials:

RBC Casting Resin, pigments, plastic/vinyl gloves, silicone ice cube trays, popsicle sticks (for stirring), plastic cups (for measuring and mixing), silicone, saw frames, wax + metal files (both large and needle), drill bits, heat gun/hair dryer, acrylic solvent, plastic polish, wax carving bits for flex shaft, ring sizers, Loctite gel control super glue, 5 minute epoxy, wax paper

DAY 1 // Working with Acrylic, Silicone Molds

- Everything you never wanted to know about plastic
- Thermoforming versus thermosetting
- Cutting, drilling, carving, filing, and sanding plastics
- Joining acrylic: solvent
- Making a simple 1 part silicone mold
- Bring small found object to trap in resin for Day 2

DAY 2 // Working with Resin

- More about mold making: 2 and 3 part molds, different types of silicone rubber for simple molds
- History of Resin
- Safety information for resin
- How to mix resin
- Trapping an object in resin- students will trap found objects in silicone ice cube trays
- Pigmenting resin
- Casting into our own silicone molds

DAY 3 // Polishing Plastics, More processes you can do with Plastic

- De-mold resin from Day 2
- Joining plastics: alternatives to solvent—super glue and 5 minute epoxy
- Polishing plastics- different types of polishing compounds
- Alternative finishes- sand blasting, pumice
- More processes: laminating, embossing, laser cutting

Resources:

Sources of Inspiration:

500 Plastic Jewelry Designs: A Ground Breaking Survey of a Modern Material by Lark Books

Artist who work with Plastics:

Emiko Oye
Yuka Saito
Suzanne Golden
Sofia Bjorkman
Debra Adelson
Loring Taoka
Lea Stein
Doug Bucci
Jennifer Merchant
Robert Dancik
Rebecca Strzelec
Anastasia Azure
Ana Margarida Carvalho
Charlene Modina
Margaux Lange
Velina Glass
Burcu Buyukunal
Karen McCreary
Jean Hsu