WASHINGTON UNIVERSITY
Glass Sampler

General Information

Parking
Parking is available on our lot to the East of the building at the corner of Delmar Blvd. and Lake Ave. On occasion students may be requested to park in the lots to the West of our building in a shared lot owned by the neighboring business.

Instructors
Instructors will be introduced at the first class.

You may direct inquiries and notices to your instructor or directly to create@stlglass.com.

Grades
Grading will be based on attendance, level of engagement and completion of projects

Attendance
• Three unexcused absences may result in a failing grade
• Automatically excused absences are documented medical or family emergencies.
• Documentation should be provided no later than 7 days following the absence.

Timeliness
• Classes begin on time.
• Arriving more than 10 minutes after the start of class may be counted as an absence.

Class Times
Some portion of each class will be devoted to lecture/demos. The remainder of the class will be independent studio time.

What to Bring
Something to drink/water bottle
Notebook and Pencil

What to Wear
Natural Fibers are better than synthetics
Safety Glasses – Studio will provide.
NO GLOVES - NO OPEN TOED SHOES - NO LOOSE ITEMS (including long hair, tie back or you may lose it).
If you do not follow these rules we reserve the right to send you home to get the appropriate attire.

Recycling and Trash
Be conscious of your standard items aluminum, plastic and glass bottles.
We also reuse as much scrap glass and other supplies as is feasible.
Please clean up after yourself, specifically if you bring food and beverages into the studios.

Cell Phones
DO NOT use cell phones during class. The instructors and your classmates expect your attention and respect.
Safety
Liability Waiver. You are required to sign two waivers, one from Third Degree and one from Washington University. All students should know the risks of working with glass. We attempt to run a safe shop, but cannot protect you from everything.

Moving in the Studios
At any time up to half a dozen people are moving around the studio holding sheets of very sharp glass, or 2000 degree glass and metal objects. To avoid cutting or burning yourself or each other, we suggest that you move slowly and let a person who is holding glass know that you are passing them.
Addressing people by name with specifics is helpful e.g. “Casey I’m right behind you.”

Drugs and Alcohol Policy
Do not come to class if you have been drinking or have consumed anything else that would impair your coordination, judgment or balance.

Burns & Cuts
Most students will receive minor burns and cuts as a natural part of learning to work with glass. Report all burns and cuts to a staff member immediately. Time is of the essence with burns. Always place the burn under cool running water as the first step. Often the pain is not as severe initially, then suddenly it can become uncomfortable. Stop working even if you think it is minor, head to the sink in the Flame studio and proceed with running cool water over the affected area while waiting for assistance from your instructor.

Un-annealed Glass
Shards and other pieces of un-annealed glass in and of the studios can be extremely dangerous and may explode without warning. Under no circumstances should ANY piece of glass be removed from the studio unless it has been annealed.

Glass Drops, pops, etc.
Hot Glass - Molten glass that falls on the floor needs to be moved immediately. Gently “kicking the blob” is acceptable. Attempt to move it only a foot or two and ask for the assistance of your instructor.
In all studios glass may break and pop, flying across the studio making it imperative that safety glasses are worn in all studios at all times.

Hot and Sharp
Assume that all surfaces are hot or sharp. Always approach with caution if you are uncertain. Specific guidelines will be shared in each studio.

How to Get Kicked Out
With over a dozen people working simultaneously, we must control the behavior of the students for the safety and enjoyment of all. We will warn you once, at the second instance of unsafe behavior you will be asked to leave.

Reckless Behavior
Disregarding the safety of the other students or the fragility of the equipment is grounds for immediate dismissal. If you do not know how to operate a piece of equipment, ask.

Outbursts of Anger
Working with glass can be frustrating, but please restrain from angry outbursts or vitriolic tirades. NEVER throw or slam an object in the studio.
Hot Glass 5 Week Session

Week 1 - Hot Shop Orientation

Safety Talk
Mental and physical preparation, clothing
Hot Equipment and Tools
Safety Glasses
Unannealed Glass
Hydration
Textbooks

Equipment Overview
Pipe Warmer, Furnace, Garage, Pick-up ovens, Marver, Glory Hole, Yoke, Bench, Break off table, Gas torch, Annealers, Pipe Bubbler
How to use the Yoke and Glory Hole
How to sit at the Bench, Cold movement drills - furnace to bench and back again

Bench and Hand Tool Description and Usage
Blowpipe & Punties, Pipe Cooler
Jacks, Tweezers, Straight & Diamond Shears, Wood blocks
Paper, Parchofi
Cold pipe rolling drill

Gathering Exercises
Cold gathering drill - Bucket practice
Blocking or shielding, working the door
Practice Gathering - 1st Gather Drills: Least Amount; Normal Gather (marver a cylinder)
Marvering - Drill: Gather, Marver, Marble
Punty Making

Week 2 - Solid Glass and Starter Bubbles

Gathering (about 1hr-45mins)
Marver and punty practice: Punty and One Gather drills
Turning and practice moving between bench and hole with hot glass: Two Gather Drill
Solid Glass exercises: Caterpillar drill, Tweezer drill, Clear paperweight drill
Transferring / "puntying": Pass the Ball drill

Gathering with a Blowpipe (about 1hr-45mins)
Marvering for Blowing
Starting a bubble
Reheating
Blowing a ball and Necking
Week 3 - Basic Blowing

Being good assistants
Anticipation
Paying attention
First assistant - turning, bench blowing, and taking heats
Second Assistant - organizing tool bench, block set up, shielding, paddling
Serving bits

Gathering second and third gathers (1st Hour)
Caterpillar Sculpture drill

Blowing Vessels (2nd + 3rd Hour)
Vessel Demonstration: demo the blowing process, make a cylinder cup
Sphere, then Cylinder in the work process
Flattening bottoms
Transferring and opening

Week 4 - Variations on Cylinder and Sphere

Amphora shape - vessels with necks
Work process for tall, closed shapes
Using wet paper for shaping
Vases with tapered bodies
Various tops - necks, trumpets, drawn neck

Week 5 - Bit Work

Hemispherical Bowls
Work process for low, open shapes
Use of Pachioffis and wet newspaper
Turning to open - three ways to shape
Kilnworking 5 Week Session

**Week 1 - Intro - Edge Construction and Thick Block**

**Safety Talk** - Mental and physical preparation, Clothing, Kiln Equipment and Tools, Safety Glasses, Unannealed Glass

**Equipment and Tool Overview** - Kilns, Cutters, Running Pliers, Grozing Pliers. Mats Rulers & Squares, Storage Space, Vacuum, Clean up

**Edge Construction Project**
Cutting Glass, Thinfire Paper, Arranging your glass, Clean and Loading Kilns

**Thick Block Project**
With this project you will be asked to create an image within a block of glass. You will be given one square foot of glass to cut into six, 4" x 6" pieces of glass. Through a stencilling technique an image will be painted onto multiple layer of glass to create an image that has depth.

**Prep For Week 2** - Bring to class some images that you are inspired by, or you can use as a starting point for your design. Images should be copied or print in black and white and be sized appropriately for your ideas. Bring in at least five images.

**Week 2 - Edge Construction and Thick Block cont.**

**Edge Construction Project**
Cleaning your glass and Loading Kilns

**Thick Block Project**
Glass Cutting, Contact Paper, Paint

**Week 3 - Fused Mosaic Intro, Edge and Thick cont.**

**Edge Construction Project**
Slumping

**Thick Block Project**
Finish painting and powder. Then load in kiln for pre-fire.

**Fused Mosaic**
Introduction

**Week 4 - Stringer Drawing, Mosaic, Thick Block**

**Thick Block**
Clean and stack for final firing.

**Mosaic**
Glass Cutting, GlasTac

**Stringer Drawing**
Introduction

**Week 5 - Stringer Drawing, Mosaic**

**Mosaic**
Powder in-fill

**Stringer Drawing**
Vitrograph Kiln
Design and Load
Flameworking 5 Week Session

**Week 1 - Intro - Torches, Kilns, and Tools**

**Safety Talk**
Mental and physical preparation, clothing
Torches and Kilns
Safety Glasses
Unannealed Glass

**Equipment and Tool Overview**
Mandrels / Tool Boxes - Putt all tools back!
Box Inventory: Eye Glasses, water cup, scissors, knife, striker, graphite marver, rod rest, mandrel holder,
Tungsten pick, mini-masher, grooved pad, greedy grabbers and tweezers (13 total)
Glass Rods / Torches
Clean up

**Torch Time - Basic Shapes**
Round, Square, Triangle, Disk, Drop-Flatten-Twist
Stringers and Dot Beads
Cylinder Beads and Grooved Marver
Make your own frit / Frit Bead / Encasing your frit bead

**Week 2 - Technique demos and torch time**
Two color bead and twist
Three dots and twist in middle
Rope twist
Stacked dots and twist in-between
Groovy flower
Encased flower with bubble

**Week 3 - Technique demos and torch time**
Stringers on a cylinder bead
Raked and pressed
Rainbow stringers shifted
Making a striped bead
Making a triangle
Masking

**Week 4 - Technique demos and torch time**
Two color twistys
Three color twistys
Applying twistys on Bi-cone
Tiger Bead
Graduated color twisty
Graduated color on barrel
Fois

**Week 5 - Technique demos and torch time**
Hearts / Fish / Flowers / Leaf / Bumble Bee