WASHINGTON UNIVERSITY  
Glassblowing Syllabus

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@stlglss.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.
**Introduction**

The focus of this class: Basic competency in the craft; fundamental practical skills; learning fundamental blown shapes; making and serving bits.

Instructor introduction, student introductions, discussion of goals and expectations, textbooks, glass color.

**Basic Class Schedule: 4 Hour Lab**

15 min-Attendance, discussion of the day’s activities and shop set up
30 min-Weekly demonstration with student assistance
Student Work time
30min Clean up

**Shop Set Up**

Get out hand tools
Empty and replenish block buckets
Empty scrap buckets, quench bucket, and refill with clean water
Set out Color (frit trays, pick up boxes, garage)
Set up pipes and irons at warmer

*Students Level 3 & 4 are required to light gloryholes and cycle annealers after week 1

**Shop Clean Up**

Put away hand tools
Rack pipes and irons
Bag color and / or dispose of color scraps, vacuum and wipe trays clean
Scrape wax from tool bench, scrape and empty trim pans
Vacuum all workstations
Remove assistants chairs and fans from working area
Collect annealed work from previous week (leave no glass in the class box)
Collect personal belongings - organize hot shop seating

1

Safety and first aid – mental preparation, clothing, eye and lung protection, sanitary concerns, burn first aid
Weekly shop duties – on time arrival, set up, clean up
Shop orientation
Use and care of equipment- lighting gloryholes, pipe warmer, torches, and pipe crack off buckets

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Cold drills – handling irons and pipes, sitting at the bench
Approaching the furnace and gathering glass - cold practice (bucket drill), “touch and go” drill, first gather drills
Solid shaping drills – marver and bench, marbles and caterpillars
Making a punty - the opposite of a typical gather
Starter bubbles

2

Gathering and Solid shaping drills – review marver and bench
Practice punties
Transferring – using a solid ball
The principle of Flashing
Gathering with a blowpipe - demonstration

**Demo: Sphere cup and cylinder cup**

Assistant roles-organize bench, opening doors, shielding the gaffer
3
Demo: Cylinder cup and shaping with jacks
Jacks/paddle/puff technique
Using diamond and straight shears properly
Tweeze and trim
Serving glass bits

4
Demo: Tapered vases/cone
Second and third gathers
Tweezing and trimming before opening
Using the soffietta (puffer)
Practice cups,taller cylinders,tapered cone

5
Demo: Creamer picture
Bit work and gathering methods
Shaping with Paper
Making and serving bits, receiving bits
Handles, prunts, wraps, lip wraps, solid feet
Trimming spouts

6
Demo: Bowls
Shortening, flattening and use of centripetal force
Use of Pachioffis (wood jacks) and paper
Practice Bowls and Plates

7
Demo: Amphora shape w/lip wrap
Pulled neck techniques - on pipe and on punty
Keeping bottom on center while stretching neck
Various vase tops
Practice vases, bottles

8
Optic Molds
How to apply color - the use of frit (crushed colored glass) and stringer (color glass strands)
Demo: Straight optic bowl
Basic color techniques - frit rolling
Set up shape for variety of molds

9
Demo: Roman Footed vase or bowl
Keep the bottom of the piece thick to ensure safe punty break
Temperature set up while creating bottom fold.

10
Demo: Flattened bottle
Stretching neck with jacks or using gravity to elongate bottle form
Variety of methods to create a flattened shape (marver, corks, board, paper)
11
Demo: Footed plate/wavy bowl
Optic Molds and Surface Pattern color application
Color effects using molds and surface color
Practice using optic molds
Practice Bowls and Plates, Floppies

12
Demo: Colored mug with lip wrap and handle
Shaping glass off the rod for various types of bits
Difference in heat for lip wrap compared to handle

13
Demo: Hourglass vase include thread wrap color application and coil body wrap
Stretching shape while keeping a thick bottom
Shaping and heating large wrap bits
Setting up threader bearings

14
Demo: Sculpture with bits
Demo: Instructor’s choice
Working asymmetrically
Sculpture punty

15
Demo: Students design
Problem solving with difficult designs

We welcome you to continue blowing glass as a renter in the Hotshop!
Email: hotshop@stlglass.com for details or give us a call! 314-367-4527