

STUDIO USER GUIDE for KILN SHOP

DDAATT EINEARTS MATTER CENTER

Updated June 2022

CONTENTS

Introduction

History Mission

Vision

Commitment to Racial Equity

General Information

Conditions for Access

Waiver Agreement

Acknowledgement Form

Code of Conduct

Access Card

Emergency Contacts

Using Other Departments

Kiln Shop Policies and Procedures

Availability

Scheduling

Payment/Check-In

Kiln Shop Equipment Guide

Kiln Shop Etiquette

Clean Up

Kiln Shop Safety

Staff Roles and Responsibilities

Maintenance Request Form

Glass Glossary

Resource Guide

Local Fares Supply & Equipment Vendors Appendix A: Waiver Form Appendix B: Code of Conduct

Appendix C: Acknowledgement Form

INTRODUCTION

History

Pratt Fine Arts Center serves as a lasting tribute to Edwin T. Pratt, a man who relentlessly championed open and equal access to educational and housing opportunities for all of Seattle's citizens. Pratt Fine Arts Center honors his memory by continuing to pursue its mission of making art education accessible to everyone, for people of all ages, all skill levels, and all backgrounds. Pratt Fine Arts Center began as a modest facility with a big vision to build a community of artists and an educational center providing the tools and the training to support the creation of visual art. Today Pratt stands exactly as its founders envisioned: as The Place to Make Art.

Mission

Pratt Fine Arts Center makes art accessible to everyone, offering a place for spirited exchange, self-expression and personal transformation through creativity. Pratt is dedicated to fostering artistic development and engagement locally, nationally and internationally. A unique multidisciplinary visual arts resource, Pratt provides education and instruction, community programs and professionally equipped art making facilities.

Vision

Pratt aspires to extend the visual arts experience to people from all backgrounds, working at all skill levels. Within an extraordinary community of artists, students and patrons, Pratt strives to be a conduit for artistic development, providing pathways to knowledge, support and inspiration and changing the way individuals see themselves and the world around them. Pratt will:

- Be the leading center for hands-on creativity in our region, well-known and celebrated for accessibility, inclusiveness, and excellence in programming
- Be widely recognized as a premier destination for artists to make new work, develop new skills, and become more well-rounded artists
- Foster a synergetic, creative community of people within a unique and dynamic urban campus environment
- Employ a sustainable business model worthy of academic study and serving as a model of idealism for arts organizations nationwide

Commitment to Racial Equity

Pratt Fine Arts Center is committed to racial equity as a core value and ongoing practice. We at Pratt recognize that institutional racism, through conscious and unconscious practices, creates vast disparities in access to publicly funded services, including arts education and support for artists. We commit to allocating resources to the breakdown of systemic barriers and the development of equitable solutions organization-wide.

GENERAL INFORMATION

Conditions for Access

To become a Studio Artist and access Pratt studios independently, users must meet the following criteria:

- Successful completion of a Studio Access Test
- Current membership at Journeyman level or higher
- Signed Waiver Agreement form on file
- Signed Acknowledgement Form confirming understanding of all policies and procedures herein

Waiver Agreement

Before any student, independent user, or user's assistant is permitted to use the facilities, he or she must first sign a liability waiver provided herein as Appendix A. Studio Artists will be required to turn in signed Waiver Agreements along with signed Acknowledgement Forms (see below) prior to their first studios access. Studio Artists are also responsible for seeing that any permitted assistants sign waivers before beginning work. Once signed, the Waiver Agreements will be permanently on file in the main office.

Acknowledgement Form

Studio Artists are required to read and acknowledge their understanding of all of the policies and procedures outlined in this document. A signed Acknowledgement Form, included here as Appendix B, must be submitted to the front desk, along with a signed Waiver Agreement, prior to beginning access of the studios.

Code of Conduct

All students, studio users, instructors and staff are expected to conduct themselves in a courteous and professional manner at all times by observing and complying with the following:

- Treat each person with respect
- Value the learning experience
- Keep agreements made with Pratt and others
- Enter fully into the experience of working together

The following actions and activities are not permitted on the Pratt premises:

- Abusive or callous behavior
- Damage to Pratt's property
- Dishonesty
- Non-compliance with safety or security rules and procedures
- Intimidation or disruptive conduct

- Possession, distribution, sale, consumption or being under the influence of alcohol or drugs while working at Pratt
- Possession of weapons
- Discrimination or harassment based on race, color, sex, marital status, sexual orientation, political ideology, age, creed, religion, ancestry, national origin or presence of sensory, mental or physical disability.

Failure to meet these expectations or other misconduct will result in disciplinary action up to and including termination of facility use or loss of membership.

Access Cards

- Studio Artists are granted Access Cards after all of the conditions of access (see above) have been met. Access Cards must be presented at check-in every time and posted in the studio while the Studio Artist is at work.
- As long as a Journeyman or Master Level Pratt Membership remain current and Studio Artists regularly access the studio, the access card will not expire. The access card will expire if 24 months have passed since the last access in a studio; in this instance, Studio Artists will need to complete the Studio Access Test again.

Pratt reserves the right to revoke Access Cards at any time. Grounds for revoking access include but are not limited to:

- Violating Pratt's Code of Conduct
- Abuse of the equipment
- Activities that put other renters in danger
- Failure to pay rental fees or membership fees
- Repeated failure to check in at the front desk
- Violation of policies outlined in this handbook or individual studio handbooks

If an Access Card is revoked, its holder will need to arrange with the Studio Manager to be reinstated according to mutually agreed upon terms. In some circumstances, reinstatement will not be an option.

Emergency Contacts

In the case of injury, disaster, or any other occurrence that presents a threat to the well-being of Pratt's inhabitants, call 9-1-1 immediately.

For all other urgent matters, visit the Front Desk or call 206.328.2200. The receptionist will relay your issue to the most appropriate staff person.

Using Other Departments

Access is authorized on a studio by studio basis. In order to use multiple studios at Pratt, Studios Artists must pass the Access Test and meet the requirements of each studio. Unauthorized access of a studio may result in the revocation of privileges.

KILN SHOP POLICIES AND PROCEDURES

*Availability

The Pratt web site, **www.pratt.org**, has current scheduling information in the Studio Access section under the "glass studios" web page. You can link to the calendar on the web or call the Front Desk and find out about access and availability.

*Scheduling

In order to reserve the use of a kiln you must email the glass studio manager Fumi Amano (famao@pratt.org). In this email you must describe the scope of your project. After the manger approves the scope of your project she will determine when a kiln will be available. You will then receive an email with a reservation form to load and fire the kiln.

The Pratt web site, www.pratt.org, has current scheduling information in the "glass studios" web page. The fusing studio kiln access is not available online and must be scheduled with the studio manager.

*Payment/Check-In

Appointments and payment will be made online to reduce interactions our front desk staff needs to make with the public. After making a reservation, report directly to the studio at your assigned time. Early arrival is strictly prohibited.

Scholarship: Scholarship recipients will need to become accessed and present their scholarship code before using the studio.

**If you cancel fewer than 72 hours before scheduled blow slot, you'll be charged a 50% cancellation fee. If you do not cancel your blow slot at least one hour before it starts, you'll be charged for the entire cost of the blow slot.

KILN SHOP EQUIPMENT GUIDE

UPON REOPENING FROM MAY 24[™], 2021, PRATT FOLLOWS THE SAFETY START GUIDELINE. ACCESS USERS MUST READ IT CAREFULLY. <u>HERE</u> We take this new world very seriously and non-adherence to the policies will result in a loss of access to Pratt classes and AU program.

- **Grinder** Must use eye protection, dust mask or respirator, make sure reservoir has ample water and sponge is correctly installed and wet. Do not wear gloves. Grinder must be plugged in at GFI outlet. When cleaning out grinder, waste must be put into stainless bucket on counter. Never put glass waste down the drain. See manual, instructor, or Glass Studio employees for further maintenance and usage details.
- **Kilns** Pratt's Warm Glass studio has five kilns. To reserve a kiln you must have Kiln Studio authorized on your access card. The following is a guide to using any one of the kilns.

<u>Kiln shelves:</u> Assess the kiln shelf prior to firing and after firing is complete. If the kiln wash has been broken off or scratched the kiln shelf must be completely scrapped off of kiln wash and protected with a fresh coat, minimum of 5 coats, no more than 8. Do not apply kiln was over old kiln wash. All kiln shelves must be scraped clean and covered with a minimum of 5 coats of wash when your firing is completed so that the shelf is ready for the next user (see kiln shelf prep page).

Loading: Load the kiln carefully. Do not lean your work or kiln furniture against the electrical elements of any kiln. A kiln is often partially vented during portions of its firing cycle but to avoid electrical shock you should not fully open a kiln to load or unload it while the program is running.

<u>Unloading the kiln:</u> Be sure that you don't open a kiln **before the temperature is at or below 70° of the room temperature (if room is 80° then the kiln must be no hotter than 150°).** Opening a hot kiln will destroy the work inside. After all glass pieces have been removed, remove all bricks and kiln furniture and place them in the designated storage location. Sweep any debris from the kiln shelf and if the wash on the shelf has been damaged or is not coated in an even and smooth manner the shelf must be scraped and recoated with wash (see kiln shelf preparation page).

<u>Fiber Products (i.e. fiber frax)</u>: All fiber products brought into Pratt should be in a sealed container or plastic bag. You should only use fiber products in the glass department and for the agreed upon activity. Do not leave fiber products in the trash cans or in the annealers. If you put fiber products into an annealer you must be the one to take it out. Fiber products that are left in an annealer or on the pickup shelves will immediately become the property of Pratt and at the discretion of the technician and coordinator, the responsible users may be prohibited from further usage of any fiber products.

GB5 CONTROLLER FOR WARM GLASS STUDIO KILNS

The only time a user should touch the controller is to check the temperature of their kiln or if they have special permission from the glass technician, glass studio manager or coordinator.

The GB5 Controller manages all five kilns/ovens. The kilns are numbered 1-5.

1. UNIT = Kiln

This number tells you which of the kilns has been selected.

Select the kiln you want by pressing the "A" key, then the kiln number.

2. TEMPERATURE

This number tells you the current temperature (Fahrenheit) in the oven.

3. HOURS & MINUTES

This number tells you how much time remains during each step. (For example, if the program calls for the oven to take 3 hours to reach a temperature of 1000 degrees, this number will start out at 2 hours and 59 minutes and count down to 0, then begin the next step.)

If you see "**HHH HH**" in the display, this means that the computer is on "manual hold", and will not start the next step until you tell it to.

If you see "----" in the display, this means that no program is currently selected. These dashes will disappear when a program is selected.

4. INDICATOR LIGHTS

These lights tell you the run status of the program running on the oven you selected. Because the controller manages up to five ovens, these lights will change, depending on which oven you have selected, and which step the program has reached. More than one of these lights may be on at the same time.

o IDLE

This red light is on when no program is active for the oven you selected.

o RUN

This green light is on when a program is running for the oven you selected.

o HOLD

This yellow light is on when the controller is on a **manual hold** for the oven you selected, waiting for the appropriate person to tell it to continue.

8. AUTOMATIC PROGRAM HOLD

This yellow light will come on if the controller determines that the oven you selected is not making the calculated temperature (either hotter or cooler) in the right amount of time. The controller will put the program on hold at that time, and start the program again when the oven has reached the appropriate temperature.

9. MONITOR MODE

This green light tells you that the controller is able to run a program. You must be in Monitor Mode to check the temperature of a kiln.

6. PROGRAM MODE

This red light tells you that the controller is able to **enter** a program, not **run** one.

7. STEP

This number will tell you which step in the program is currently running. (In program mode, it will tell you which step you are entering in the program.)

8. KEYPAD

The letters and numbers on the keypad tell the controller what you want it to do, and how much of it you want. They have quite different functions depending upon whether the controller is in monitor or program mode.

LETTERS

A This letter, plus the oven number, selects a given oven and puts you in "Monitor Mode"

Press "A", then the number of the unit you wish to select. Always press "A" + the unit (oven) number before you attempt to do anything with the controller.

This allows you to check the status of a selected kiln.

B This letter switches you to "Program Mode" You can review a loaded program, clear the current loaded program, load a program from the library, or enter your own.

Press "**A**", then the number of the unit you wish to select. Then Press "**B**" to go into Program Mode

C "Clear"- This letter allows you to clear entries while in Program Mode

E "Enter" – In Program Mode, this letter allows you to review a loaded program &/or enter in steps for a manual program. In Monitor Mode this letter will start a loaded program in the kiln selected.

F "Cancel" - In Program Mode, this letter will clear a loaded program. In Monitor Mode, this letter will cancel a running program.

NUMBERS

- **1-5** These numbers represent the five ovens being managed the controller. The ovens are clearly labeled by number.
- **1-9** These numbers correspond to Firing Schedules programmed into the controller:

LOADING A FIRING SCHEDULE FROM THE LIBRARY

These four programs are in the controller's library.

#6: Tack Fuse & Anneal#7: Full Fuse & Anneal#8: Slump & Anneal#9: Kiln Shelf Drying

You may load any of them with the following procedure:

- Always select the Kiln first : Press "A" then the Unit (Kiln) #
 Example: Press A5 to select Kiln #5
- Check the current status of the kiln temperature, indicator lights, etc. Make sure the kiln is **IDLE** (red light) before switching a program.
- Press **"B"** to switch to **"Program Mode"**. You can review a program that is loaded by repeatedly pressing the **"E"** key.
- If the proper program is present press the "B" key to return to "Monitor Mode"
 - Start the Kiln Program by pressing press the "A" key and the Unit (Kiln) #
 - Example: Start Kiln 5 with the Current Loaded Program

 Press A5 then E5
- Need a different program?
 - Always select the Kiln first : Press "A" then the Unit (Kiln) #
 - Press "B" to switch to "Program Mode"
 - Press the "F" key and the Unit (Kiln) # to delete the current program
 - You will then see no numbers in the controller windows
 - Press the **"A" key twice (AA)** and the letters "LL LL" (Load from Library) will appear in the window.
 - Note if "LS LS" appears instead (Load & Switch) you did not clear the active program. You must clear this before entering a number or you will not load the correct schedule.
 - Press "C" to clear LS LS
 - **"F"** key and the **Unit (Kiln) #** to delete the current program
 - Press the "A" key twice (AA) and the letters "LL LL" (Load from Library) will appear in the window.
 - Press the # (6-9) of the firing schedule you want to load, then press E
 - **Example:** Loading Full Fuse Schedule into Kiln 5
 - □ Press A5 to select Kiln #5
 - □ Press **B** to enter Program Mode
 - Press F5 to delete the current program
 - Press AA and LL LL appears in the window

- □ Press **7E** to enter Full Fuse
- Review the program by pressing "E" repeatedly to go thru each step
- □ Press **A5** to select Kiln #5
- Press E5 to run the loaded program in Kiln #5
- After the proper program is present press the "B" key to return to "Monitor Mode"
 - Start the Kiln by pressing press the "A" key and the Unit (Kiln) #
 - Example: Start Kiln 5 with the Current Loaded Program
 Press A5 then E5

Loading your own Kiln Schedule:

- Always select the Kiln first : Press "A" then the Unit (Kiln) #
 - Example: Press A5 to select Kiln #5
- Check the current status of the kiln temperature, indicator lights, etc. Make sure the kiln is **IDLE** (red light) before switching a program.
- Press "B" to switch to "Program Mode". You can review a program that is loaded by repeatedly pressing the "E" key
- Press the "F" key and the Unit (Kiln) # to delete the current program
 - You will then see no numbers in the controller windows
 - Enter your own schedule:
 - Enter time in HR:MIN (2 hrs = 2:00, 30 minutes = 0:30)
 - Press E to enter
 - Enter Temperature (ex 1000), Press E to enter
 - You will be automatically taken to the next step
 - Continue entering steps until finished
 - Press "A" then the Unit (Kiln) # to return to Monitor Mode
 - Press "B" to review what you entered repeatedly pressing
 "E" will cycle you thru the schedule
 - You can edit individual steps by pressing "C" to clear time or temp
 - You can delete the entire schedule by pressing the "F" key and the Unit (Kiln) #
 - •
- After the proper program is present press the "B" key to return to "Monitor Mode"
 - Start the Kiln by pressing press the "A" key and the Unit (Kiln) #

Example: Start Kiln 5 with the Current Loaded Program

 Press A5 then E5

NOTICE: New HOLD step for all kiln firings

Purpose:

To ensure all noxious smells are released from the kilns overnight, when no one is using either the kiln forming or the flame working studios. This will ensure a better working environment for all studio users. Noxious smells come from glue, fiber frax and other materials in the kilns.

Shelf firing does not require a hold. Please wash and fire shelves as previous. **Procedure:**

All programmed kiln schedules include a HOLD step as the first step. If you are entering your own schedule, please add this 1st step.

It looks like:

Temp 0 (blank when you review the program)

Time 0:01

Edit the first step when you load a schedule. Count the time between when you are starting the kiln and 10pm, when Pratt closes. This will ensure that the kiln holds until 10pm, and then starts the firing at 10pm.

Example:

Loaded work at 2:00 pm – there are **8 hrs** until 10pm.

Load the appropriate kiln schedule from the library. (You are now in Program Mode)

Hit Clear (C) twice to clear the temp and the time of the 1st step only. Enter 8:00 (eight hours, 8 hrs) for the time of the 1st step.

Press Enter.

Temp will show 0. Leave temp at 0 (this is HOLD).

Press enter.

Your new 1st step will look like:

Temp 0 (blank when you review the program)

Time 8:00

Review Program, Start Kiln. The actual kiln schedule will begin at 10pm, after the hold.

Fusing Studio - Firing Schedule Library

#6 - Tack Fuse & Anneal			
Step	Temperature	Time (hr:min)	Rate (deg/hr)
1	0	0:01	hold
2	1000	3:00	300
3	1000	1:00	hold
4	1250	2:00	125
5	1250	0:30	hold
6	1350	0:01	afap (9999)
7	1350	0:10	hold
8	900	0:01	afap (9999)
9	900	2:00	hold
10	700	2:00	100

#7 - Full Fuse & Anneal			
Step	Temperature	Time (hr:min)	Rate (deg/hr)
1	0	0:01	hold
2	1000	3:00	300
3	1000	1:00	hold
4	1250	4:30	50
5	1250	:30	hold
6	1480	0:01	afap (9999)
7	1480	0:10	hold
8	900	0:01	afap (9999)
9	900	2:00	hold
10	700	2:00	100

#8 - Slump & Anneal

Step	Temperature	Time (hr:min)	Rate (deg/hr)
1	0	0:01	hold
2	1225	4:15	288
3	1225	0:05	hold
4	900	0:01	afap (9999)
5	900	2:00	hold
6	700	2:00	100

#9 - Kiln Shelf Drying			
Step	Temperature	Time (hr:min)	
1	600	:01	
2	600	:30	

Fusing Studio - Additional Schedules

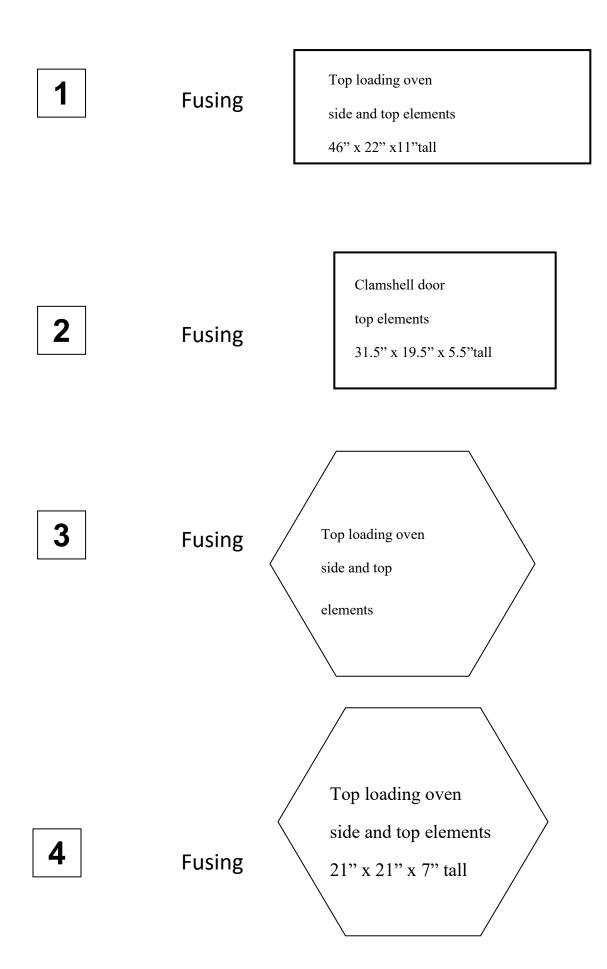
Fire Polish & Anneal			
Step	Temperature	Time (hr:min)	Rate (deg/hr)
1	0	0:01	hold
2	1000	3:00	300
3	1000	0:30	hold
4	1300	1:00	200
5	1300	0:10	hold
6	900	0:01	afap (9999)
7	900	2:00	hold
8	700	2:00	100

THICK WORK - Full Fuse				
& AnnealStepTemperatureTime (hr:min)Rate (deg/hr)				
1	0	0:01	hold	
2	1000	3:00	300	
3	1000	1:00	hold	
4	1250	2:30	50	
5	1250	1:00	hold	
6	1500	0:01	afap (9999)	
7	1500	:30	hold	
8	900	0:01	afap (9999)	
9	900	4:00	hold	
10	800	4:00	25	
11	700	2:00	50	
12	70	4:00	162	

THICK WORK - Slump & Anneal					
StepTemperatureTime (hr:min)Rate (deg/hr)					
1	0	0:01	hold		
2	1000	8:00	112		
3	1000	1:00	hold		
4	1225	1:00	125		
5	1225	:05	hold		
6	900	0:01	afap (9999)		
7	900	4:00	hold		
8	800	4:00	25		
9	700	2:00	50		
10	70	4:00	162		

THICK WORK - Fire Polish & Anneal

Step	Temperature	Time (hr:min)	Rate (deg/hr)
1	1000	8:00	112
2	1000	1:00	hold
3	1300	2:00	100
4	1300	0:10	hold
5	900	0:01	afap (9999)
6	900	4:00	hold
7	800	4:00	50
8	700	2:00	100
9	70	4:00	162





Fusing

Clam-shell door

top elements

44" x 22" x 6.5"tall

Firing

A completed firing schedule must be attached to the outside of the kiln you are renting. This schedule will list your name, date, phone number and the firing schedule. If you are using a schedule that differs from Pratt's preprogrammed schedules the coordinator must approve your alternate schedule. The Kiln Shop Coordinator, Glass Technician, or Glass Studio Manager must enter the program into the GB5.

Cancellations

A kiln that has been scheduled in advance, and is canceled at least 8 hours before it begins, will be made available for other users. The previously scheduled user will not have to pay the access fee. **People who cancel their slot fewer than 2 hours prior to the beginning of the slot will be responsible for the entire access fee**.

Rules and Procedures When Accessing a Kiln

<u>Preparation Time</u>: Plan to arrive up to a 1 hour ahead of your scheduled kiln loading time. You should check and prep necessary kiln shelves and furniture.

<u>Kiln Shelf Preparation</u>: All kiln shelves must be scraped clean and covered with a minimum of 5 coats/maximum 8 coats of wash when your firing is completed so that the shelf is ready for the next user.

Assess the kiln shelf prior to firing and after firing is complete. If the kiln wash has been broken off or scratched the kiln shelf must be scrapped free of old kiln wash and protected with fresh coats of wash. Do not apply kiln wash over old kiln wash.

Carefully scrape old kiln wash from shelf with the designated spackle knife onto a piece of newspaper. **Respirator is required!** Be careful to just remove the unwanted wash and not scar the shelf.

Wipe excess dust from shelf and dispose of newspaper and debris.

Place shelf in a clean stable area and apply 5 coats of wash. The kiln wash should be found in the Renter's tool cabinet and should be stirred well prior to application.

Using broad strokes evenly apply first coat in one direction, apply second coat perpendicular to the first, third coat diagonal, fourth opposite diagonal to third, repeat first coat direction for fifth application.

Carefully place shelf back in kiln

<u>Firing Schedule</u>: Have a Firing schedule worksheet filled out with the firing program that you are going to use. Worksheets are available in the studio. If you are going to use a program other than the pre-programmed schedules that Pratt provides you must have the time and temperature of each step written out as well as approval from the warm glass studio coordinator, glass tech, or glass studio manager. Also indicate on the firing worksheet estimated date and time when you will be removing your work from the kiln.

<u>Hand Tools</u>: Pratt provides an assortment of hand tools including: glass cutters, glass pliers (running and grozer), scissors, and rulers. All Pratt tools have 'Pratt' engraved or marked on them. In addition, Pratt provides gloves and glasses. **Users need to provide their own respirators**. Hand tools designated for studio renters will be kept in a cabinet in the warm glass studio. The key to this cabinet is kept at the front desk and is available for renters who have been accessed to the studio.

<u>Slumping Molds:</u> Pratt provides an assortment of ceramic and metal slumping molds that are available for renters. These are located within the same cabinet as the hand tools. The key to this cabinet is kept at the front desk and is available for renters who have been accessed to the studio.

Mold Preparation:

Assess the slumping mold prior to firing and after firing is complete. If the kiln wash has been broken off or mold must be protected with additional wash. Carefully remove flaking kiln wash with fine grit sandpaper onto a piece of newspaper. Respirator is required! Be careful to just remove the unwanted wash and not scar the mold.

Wipe excess dust from shelf and dispose of newspaper and debris Place mold in a clean stable area and apply 2 coats of Hotline Primo Primer wash. This kiln wash is specifically for the molds and is different than the kiln shelf primer. The Primo Primer has a purple tint and can be found in the Renter's tool cabinet and should be stirred well prior to application. **Using broad strokes evenly apply** first coat in one direction and then apply second coat perpendicular to the first.

Fire the primer wash on the molds using the kiln wash drying program stored in the GB5 library.

<u>Specialty Tools and Materials</u>: If you are interested in bringing in tools or equipment (other than hand tools or harmless tools), which could cause a problem for other users or pose potential safety risks, you must contact the Glass Technician a minimum of 3 days before you plan to bring in such tools.

Equipment Failure

<u>Kilns:</u> Please check kiln before loading for loose/dangling elements. If two elements are touching they will burn out and the annealer, instead of coming up to temperature, will remain at a low temperature for many hours.

If the readout on the GB5 does not make sense or shows an error: Check to see that the thick power cord leading to the oven elements is plugged in (the controller has a separate cord) see page 21. If the error persists, call the Glass Technician.

If the kiln takes too long to come up to temp: If the annealer is not coming up to the desired temperature quickly enough there is nothing that can be done to hurry it up. You may look inside to see if all elements are bright orange, and note any that are not to report to the Glass Technician. You should either be prepared to wait for a few hours, or abandon your firing and call the Glass Technician. Never attempt to insert a propane torch into an electric annealer to speed it up.

KILN SHOP ETIQUETTE

<u>Music</u>: Music selection and volume must be acceptable to other Pratt users.

Talk to the other users working next to you. Make sure you know what the other workers are making and how you will need to share the shop. If you are going to be doing something that could cause harm such as cutting glass or cleaning a kiln shelf warn your studio mates so that they can put on the proper protection.

<u>Keep your area clean</u>. Utilize a reasonable amount of space when working on a project and make sure you pick up any unsafe materials (i.e. shards of glass) if you will be out of the room for a significant amount of time. <u>Clean up</u>. You must thoroughly clean up and must never expect someone else to clean up for you. Failure to clean up and/or abandoning a project for an unreasonable amount of time will be addressed in the following ways:

- <u>1st incident:</u> The glass studio manager and coordinator will have a discussion with the user, and together, assess the situation.
- <u>2nd incident:</u> The glass studio manager and coordinator will have a discussion with the user, and together, assess the situation. In addition the manager may ask the user to volunteer 4 hours of their time before their next rental or be charged \$50.
- <u>3rd incident</u>: The glass studio manager and coordinator will have a discussion with the user, and together, assess the situation. In addition the manager may ask the user to give up a month of studio use.
- <u>4th incident:</u> The glass manager and coordinator will have a discussion with the user, and together, assess the situation. In addition the manager may ask the user to return their access card and the status will be reviewed by technicians, coordinator and/or at the glass users at the next glass users meeting.

Clean Up Procedures

Note condition of studio and kilns before you begin work. If the previous user has not cleaned up, please ask them to. If they have already left and you are unable to contact them, report this on a Work Request form immediately and a member of the staff will contact the previous user.

- You should only have to clean up in the spaces you have worked.
- If you have used a kiln the kiln shelf must be left in a smoothly coated condition and kiln furniture put away.
- If you have utilized the work tables and/or sink you must wipe down the counter areas and sweep the floor. If the paper protecting the work tables cannot be cleaned or is otherwise too dirty for the next person to work on, contact someone in the glass tech office for replacement paper.
- Plaster or silica mold construction should not occur in the Kiln Shop and plaster and silica should not be disposed of in the studio sink.
- Replace all tools to their proper location.
- Lock tool cabinet and return key to the front desk.

Correct Location of Various Tools

All tools must be returned to their proper location. The tool cabinet is used by both classes and renters. Please make sure to keep the cabinet in a neat and clean order. A key to the cabinet is found at the front desk.

Storage

There is minimal storage available for work that is going into or out of a kiln. Please pick up work as soon as possible. If you do not want anyone to unload your kiln, make sure you are available to empty the kiln in a timely fashion. If you do not unload the kiln before it is needed by another user or class it will either be unloaded by the coordinator or studio manager. You may also be charged for an additional rental day.

Glass Pickup Shelves

All pieces taken from a kiln should be moved to the pickup cabinet. <u>Work</u> <u>that has a date more than 14 days old will be thrown away</u>. You should make an effort to remove your work as soon as it has safely reached room temperature, especially if you have large pieces. Please bring your own packing material to transport pieces home, especially if you have a lot of work or if the work is large.

KILN SHOP SAFETY

First Aid

Report all accidents, large or small, by filling out an incident report form located inside of the first aid box door. The first aid box is located on the wall between the fusing and flameworking studios. **Notify a staff person** of your injury IMMEDIATELY. This is very important. In the event of a minor burn, immediately run cold water on the affected area for a full 20 minutes, then use a burn cream, or, better yet, gel from an aloe vera plant, and bandage. In the event of a more serious burn, we have an emergency shower located on the column near the corner glory hole in the hot shop or the metal fabrication area. If you have a more serious burn or other injury, you should either call an ambulance or be driven directly to an emergency room. The nearest hospital is Providence, located between 18th and 16th on Jefferson, six blocks north of Pratt. The best route is to turn left out of the parking lot, go east on Main to 20th and turn left, go north on 20th to Jefferson, turn left and go to 18th.

Other Safety Precautions

Eve Protection: You are required to wear eve protection. If you are cutting glass it is advisable to wear glasses that have side shields that protect against reflected light and exploding un-annealed shards.

<u>Clean Air:</u> Due to the toxicity of various chemicals used in the Warm Glass Studio, certain procedures should be followed:

- Wear a dust mask or respirator with purple filter when scraping kiln shelves
- Wear a dust mask or respirator when working with glass powders Use sweeping compound when you dry sweep, and wear a dust mask or respirator with purple filter.
- No smoking in the building.

<u>Heat:</u> Remember, you probably can't see heat. Kilns can be intensely hot and should never be used as a seat or have things stacked on top of them.

<u>Sharp Glass:</u> Do not leave broken work on glass pickup shelves or work tables where other people can cut themselves.

<u>Fire Extinguishers:</u> A fire extinguisher is located near the first aid station. In case of fire, use the extinguisher, but be sure to inform the Glass Technician so that it can be serviced for future use.

*Staff Roles and Responsibilities

The staff at Pratt is committed to creating a better facility for both the student and the professional artist. It is important that you know who the staff members are along with their respective duties.

- <u>Glass Technician</u> The glass tech maintains equipment, insures quality glass in the furnace, maintains supplies of raw materials, and is responsible for general policies and procedures in the glass departments.
- <u>Glass Studio Manager</u> The studio manager maintains supplies of materials and equipment for classes, develops and organizes curriculums and oversees the running of the flame, kiln, cold and hot studios.
- <u>Chargers</u> There are 2-3 chargers who are responsible for maintaining the level of glass in the furnace and securing the building at night.
- <u>Glass Coordinator</u> The coordinator is responsible for orienting people to the studios, and issuing access cards.

• <u>Front Desk Personnel</u> – The front desk person will schedule the use of the fusing and slumping rental kiln, annealers, cold shop and sand blaster time, and scheduling of blow slots and casting slots, as well as any other special equipment.

*Maintenance Request Form

(In case of equipment problems fill out this form, found on the hot shop office door, and leave it there)

PRATT FINE ART	S CENTER	
Work Request / Suggestic	on Form Glass	
Circle one: HOT SHOP COLD SHOP	KILN SHOP	FLAME SHOP
Specific Request (please be as detailed as possible)		
Name:	Date: Phone:	
Would you like to be notified when this is resolved? PLEASE DO NOT WRITE BE	YES	NO
Staff follow up comments:		

<u>GLASS GLOSSARY</u>

Acid Etch - The process of etching glass using hydrofluoric acid. Note: hydrofluoric acid is extremely dangerous and is not allowed at Pratt.

Air Twist - A decoration in which two or more air bubbles are twisted inside the glass.

Alumina - A highly refractory material that is used in kiln wash and in fiber products. Melting point 3722° F.

Alumina Oxide - A an abrasive media used in sandblasting and glass polishing.

Alumina Hydrate - A refractory material with a very high melting point (3704°). It is used in kiln wash and in refractory materials to prevent fusing.

Anneal - To reduce the stress in a piece of glass by slowly releasing the heat.

Annealer - An oven that goes up to about 900° and then slowly drops in temperature over 8 or more hours.

Ariel - Similar to a graal except it is cut more deeply and gathered over to trap air in the cuts.

Batch - A mixture of raw chemicals used to make molten glass.

Bench Blow - When a glass blower's assistant blows into the blowpipe while the glassblower is shaping the glass.

Bit - A small blob of glass usually being added to a piece as decoration. **Blocks** - U-shaped fruit wood blocks with a handle used to center and shape glass.

Blowpipe- A 4¹/₂ foot long stainless steel pipe used to gather and blow glass. **Cane (Threads) -** Thin glass rods pulled from a molten blob of glass.

A Canna – The technique of picking up larger cane on a collar and forming the object out of that material only. The term is also used to describe objects made with this technique. Also called a fili (with lines.)

Capping - Placing your hand over the end of a pipe to trap air which will expand due to heat and blow out the bubble.

Cerium Oxide - A powdered rare earth metal used on the felt wheel to achieve a high polish on glass.

Charge - To put batch or cullet into the furnace.

Cheater (Button) - A small button of glass that is applied to the end of a piece to protect the piece from being damaged by the punty.

Chords - Bands of denser glass which are usually drawn up from the floor of the furnace.

Collar – A gather of glass on a pipe, blown through and made into a disk used to pick up cane for a canna technique. Also used with murrini and graal blanks.

Continuous Melt Furnace - A furnace with separate melting and gathering chambers, which can be worked 24 hours per day.

Crown - The roof of a furnace.

Cullet - Broken glass put into the furnace to make molten glass.

Day Tank - A furnace whose floor is a liner that hold the glass.

Devitrification - A crystalline growth on the surface of glass caused from the glass molecules beginning to align.

Diamond Shears - Shear like tool used to make round cuts in glass as opposed to straight cuts.

Dog House - The opening through which you charge a continuous melt furnace.

Duckbill Shears - Shears with a curved-up end used for trimming lips and other cutting.

Expansion Coefficient - A measure of the amount of physical expansion that takes place during temperature changes. Two different types of glass with the same expansion coefficient are usually compatible.

Fango –Sea mud used to coat the plates to prevent the cane from sticking to the plate. Locally the best source is Whidbey Island.

Ferrini (also ferretti, ferrigi, etc.) – Small pieces of square steel bar used to prevent the cane from rolling off the plate.

Fiber Products (Frax) - A blanket-like refractory material that has a high melting point and can be used as insulation on furnaces and annealers or as a malleable surface upon which to place hot pieces in the annealer. Frax can be rigidized with a solution of water (65%) and sodium silicate (35%). One of the major components of fiber frax is silica, which is extremely toxic to breathe. This material must be handled with caution.

Fining Out - The process of reducing the number of seeds or small bubbles in the glass. This is usually done by allowing the glass to soak for a long period of time after charging. (see Squeeze)

Flue - The chimney on a furnace.

Fuming - The process of introducing a metal oxide into the hot air around a piece for the effect of luminescence. Note: this is often a toxic process and not allowed at Pratt.

Fuse - To heat two or more pieces of glass until they fuse together.

Gaffer – Lead or head glass worker. The person who directs the work of their assistants.

Gather - Drawing glass from the furnace by dipping and rotating a blowpipe or punty in molten glass.

Gatoi – A steel or iron plate with grooves used for spacing cane.

Glass Line - The highest level the glass should reach in a full furnace.

Glory Hole - A small re-heating furnace made of an insulated chamber and a burner.

Graal - A piece decorated by cutting through an overlay to create a design and subsequently reheated, blown to its full shape.

Jack Down - To put a neck or crease in a piece with jacks.

Jacks - A tweezer-like tool with tips made of steel. Used to make creases and necks and for general shaping.

Kevlar - A heat resistant material used on insulated gloves.

Kiln Wash - a combination of calcium carbonate and alumina hydrate used to prevent glass from fusing with kiln furniture or slumping molds.

Kugler - A trade and generic name for densely colored glass rods. Kugler is one of the main sources of solid color for blown glass. (see also Zimmerman) **Lapping -** The process of putting a flat surface on a piece.

LFE Controller - A brand name PID process controller capable of holding one profile which is up to 12 segments long.

Marver - A thick steel table used to shape and cool glass. The word marver originates from 'marble' which is what was originally used.

Mezza Filigrana (Half Filigree) – the technique of picking up cane on a bubble and twisting the bubble to form a spiral pattern in the cane. Also used to describe objects made with this technique. Also called a retortoli (twisted.)

Mild Steel - The type of steel we are most familiar with. Mild steel rusts and burns at temperatures over 1000°. Used as the structural element in most hot glass equipment.

Mizzou- A high strength, high temperature castable refractory often used to cast glory hole and furnace doors.

Moile (moil) - The glass left on the blowpipe after you crack off the piece. Muller - A large device used to mix sand for casting.

Nichrome wire (Kanthol A-1) - Also known as resistance wire, this wire is used to wind elements for electric kilns and has a melting point around 2500°.

Olivine - An infusible neosilicate sand that is often used for glass casting and other procedures where free silica is unacceptable.

Optic Mold - An aluminum or bronze mold that glass is blown into to achieve a ribbed look.

Overlay - A thin layer of colored glass on the outside of a piece.

Oxidation (combustion) - The presence of excess air in a flame or

combustion chamber. In an oxidation atmosphere there should be no flame coming out of the furnace or glory hole.

Paddle - A tool usually made of cherry wood and used to flatten glass and block heat.

Paciofis - (pronounced 'par-chovies') Wooden jacks.

Partlo MIC-6000 - A process controller capable of storing up to eight 6 segment profiles.

Pastoral – A large fork-like tool used to heat cane plates.

PID Controller - A controller that controls proportional output using three parameters, gain (proportional band), integral (reset), and derivative (rate). Used in furnaces and usually not in annealers.

Pi Calipers – Used to size collars and bubbles for cane and murrini pickup. **Piera –** Rectangular plates of steel or iron used to arrange and heat cane for pickup.

Polariscope - A device employing two polarizing filters, used for examining work for internal fatigue, which appears under the filters as rainbow of color.

Post – A gather of glass on a solid rod used to pull the cane gather. **Pot Furnace** - A furnace that has a crucible to hold the molten glass.

Profile - A series of ramp and soak parameters that are entered into a controller to determine a heating or cooling cycle.

Pumice - A fine volcanic glass used for polishing. Most common size is ought and a half (0 1/2).

Punty - A 4-foot long stainless steel or mild steel rod used to transfer work to after using the blowpipe. A Punty is also a term used for the bottom of a vessel where a mark is left from where the punty rod was attached.

Quartz Inversion - The change in the crystalline structure of quartz at various temperatures. During these changes the quartz in glass actually changes in size causing strain.

Reduction (combustion) - The presence of excess gas in a flame or combustion chamber. In reduction you will probably see a flame coming out of the glory hole or furnace.

Refractory - A material property which indicates a resistance to melting. Common materials that are usually considered refractory are alumina, silica, and zirconium.

Reticello (Netting) – The technique of blowing a bubble of a canna twisted in one direction into a bubble of the same number of cane twisted in the opposite direction. The result is a series of air bubbles trapped in between the overlapping gaps in the cane. The term is also used to describe objects made with this technique.

Sand blasting - The process of removing, carving, or etching glass with a sandblasting machine.

Seeds - Tiny bubbles in the glass (see Fining Out)

Shards - Small fragments of colored glass melted into a piece for decoration. **Silica (Si)** - The major component of glass. Free silica which is liberated during grinding and polishing is extremely toxic and has been linked to various cancers and white lung disease.

Silicon Carbide - A grit used for grinding glass. Silicon Carbide is a toxic material. Most common grits are 70 for rapid cutting, 220, 400, and 600 for smoothing.

Slump - To heat glass until it softens and bends.

Soffietta - A cone shaped device used to inflate pieces on the punty. **Squeeze -** A period at the end of the soak cycle during which the

temperature is dropped to about 1900° very quickly before returning to working temperature. The squeeze takes place at the beginning of the day. **Stainless Steel -** An alloy of steel, which contains chromium and is particularly

resistant to rusting. The most common alloy is 304 and an alloy, which stands up to heat particularly well, is 316.

Steam Stick - A wooden cone shaped tool used to inflate a piece on the punty by force of expanding steam.

Stones - Small rocks in the glass, which usually comes from the furnace crown or tank.

Straight Shears - Shears made of tool steel which are used to make straight cuts and to trim lips.

Tweezers - Used for shaping and pulling glass and for cooling a neck or a punty with a drop of water.

Underlay - A thin layer of colored glass on the inside of a piece.

Vermiculite - A mica based material that is commonly used in gardening. Vermiculite is heat resistant and can be used to place hot glass pieces on in the annealer or while being worked.

Wisk brush – Used to brush cane immediately after pickup to remove any debris on or in between the cane.

Zanfirico – Complex cane made by picking up cane on a solid gather and then twisting as the cane is pulled.

Coffee/Food Establishments Near Pratt

Loosely organized by location (immediate vicinity, International District, 23^{rd} and S Jackson St)

Immediate Vicinity Broadcast Coffee

1918 E Yesler Way (corner of Yesler and 20th) Coffee, sandwiches, pastries

Moonlight Café

1919 S Jackson St Vegan, vegetarian and other Vietnamese full meals and lighter fare

Seven Star Mini Mart

1917 S Jackson St Convenience store next. door to Moonlight Ice cream novelties as well as the usual chips, soda, candy

Franz Bakery Outlet

2006 S Weller (20th and Jackson St) Fresh donuts, croissants, and bread

Northwest Tofu Restaurant and Factory

1911 S Jackson St Chinese with vegetarian options

Wonder Coffee and Sports Bar

1800 S Jackson St, Suite E Ethiopian and International food

Dominos

1800 S Jackson St, Suite D Pizza chain; 206-325-3230 for delivery

Plaza Dome El Obero

1712 S Jackson St Coffee, beer, wine; sandwiches (vegan option), Panini, artisan salads

Cheeky Café

1700 S Jackson St (corner of Jackson and 17th) Closed Mondays Asian fusion and comfort food for the masses; breakfast, lunch, dinner; vegetarian options

G.R.E.A.N. House Coffee and Café

123 21st Ave (Between Fir St and Yesler Way) Breakfast and lunch; closed Mondays

23rd and S Jackson St Starbucks Corner of 23rd and Jackson St

Sandwiches, cookies, coffee

Red Apple

Promenade 23 (at 23rd and Jackson St) Grocery store

Taco Del Mar

Promenade 23 (at 23rd and Jackson St) Mexican chain serving Baja style Tacos, burritos, quesadillas, taco salad, etc.

Subway

Promenade 23 (at 23rd and Jackson St) Hot and cold sub sandwiches; vegetarian options available

International District

Saigon Deli

1237 S Jackson St Very inexpensive high quality Vietnamese take-out; Banh mi (sandwiches) and hot food with vegan and vegetarian options; \$1.50 sandwiches—a Pratt favorite!

Malay Satay Hut

212 12th Ave S (go west on Jackson St, go right on 12th) Delicious Malaysian fare with vegetarian and vegan options

Tamarind Tree

1036 S Jackson St, Suite A Highly acclaimed Vietnamese restaurant; 206-860-1404 for take-out orders

Uwajimaya

600 5th Ave S (go west on Jackson St, go left on 6th) Food court and grocery Too many options (including many vegetarian) to list

World Pizza

672 S King St (Chinatown) Closed Mondays Artisanal pizza, many varieties served by the slice; many vegetarian options

RESOURCE GUIDE

Adhesives

R.S. HUGHES SEATTLE 7031 South 193rd Street Kent, WA 98032 Tel (206) 767-4463

QCM Adhesives and Coatings 930 S. Central Kent, WA 859-0933

Arts Organizations

American Crafts Council 72 Spring St. NY, NY 10013 (212)274-0630

Allied Arts Foundation 4111 E. Madison St. #52 Seattle, WA 98112 206.624.0432

Artists Trust 1835 12th Ave Seattle, WA 98122 (866) 218-7878

Glass Art Society 6512 23rd Ave NW #329, Seattle, WA 98117 (206) 382-1305

4Culture 101 Prefontaine PI S Seattle, WA 98104 (206) 296-7580

Seattle Office of Arts and Culture arts.culture@seattle.gov (206) 684-7171

Color

Olympic Color Rods 818 John St. Seattle, WA 98109 206-343-7336

Hot Glass Color & Supply 2227 5th Ave Seattle, WA 98121 (206) 448-1199

Gaffer Glass USA 19622 70th Ave South, Unit 4 Kent, WA 98032 (253) 395 3361

Hand Tools and Blow Pipes

Artco 348 N. 15th St. San Jose, CA 95112 (408)288-7978

Blockhead Tools 1825 Franklin St Bellingham, WA 98225 (206) 979-1058

Jim Moore Glass Tools P.O. Box 1151 Port Townsend, WA 98368 360.379.2936

Steinert 1000 Mogadore Rd. Kent, OH 44240 216-678-0028

Spiral Arts, Inc.

901 NW 49th Street Seattle, Washington 98107 206-768-9765

Hardware Items

Johnstone Supply 18205 Andover Park Way Tukwila, WA 575-0755

Pacific Industrial Supply 2960 4th Ave. S. Seattle, WA 682-2100

Lampworking

Wale Apparatus Co. 400 Front St. PO Box D Hellertown, PA 18055 (215)838-7047

Frantz Bead 130 West Corporate Road Shelton WA 98584 USA 800-839-6712

Safety Equipment

Central Welding Supply 841 NW 49th Street Seattle, WA 98107 206-783-2283

Schools W/ Glassblowing

Haystack Mountain School of Crafts PO Box 518 Deer Isle, ME 04627 (207) 348-2306

Penland School of Crafts Penland, NC 28765 (704)765-2359

Pilchuck Glass School 107 S. Main St. #324 Seattle, WA 98104-2580 206-621-8422

Urban Glass 647 Fulton St Brooklyn, NY 11217 (718) 625-3685

Other Materials

Abrasives Northwest Silicon carbide grits 1114 Andover Park West Tukwila, WA 575-0735

Seattle Pottery Supply 35 S. Hanford Seattle, WA 587-0570

Thompson Enamels Box 310, 650 Colfax Newport, KY 41702 (606)291-3800

Appendix A: Waiver Agreement

PRATT FINE ARTS CENTER

WAIVER AGREEMENT

INSTRUCTORS AND STUDIO COORDINATORS:

FOR ALL PRATT FACILITY USERS:

There is an element of risk inherent in participating in artistic processes, handling artistic materials and operating machinery. Pratt Fine Arts Center takes every precaution to ensure the safety of our facility users. Being an equipment-intensive facility, it is important for users to understand that this equipment can be dangerous if used improperly and/or without teacher supervision. The following general waiver must be signed in order to participate in any educational program at Pratt or to use the facilities as an independent study student.

In consideration of my participation in the educational programs and/or use of the facilities as an independent user, I hereby discharge and forever hold harmless Pratt Fine Arts Center, its Board, staff, volunteers, the City of Seattle Department of Parks and Recreation and all agencies whose property and personnel are used as part of Pratt's educational program and any sponsoring, co-sponsoring or funding agency(ies) or individual(s) for responsibility for any injury, illness, death, damage, loss, accident, delay or irregularity which may be occasioned for any reason whatsoever during the course of my participation. I certify that I am physically able to participate in all the activities for which I am enrolled. We assume no responsibility for losses or additional expenses due to influences beyond our control.

I also give my permission for Pratt Fine Arts Center to use without limitation or obligation: photographs, film footage, tape or video recordings which may include my image or voice.

FOR STUDIO USERS ONLY:

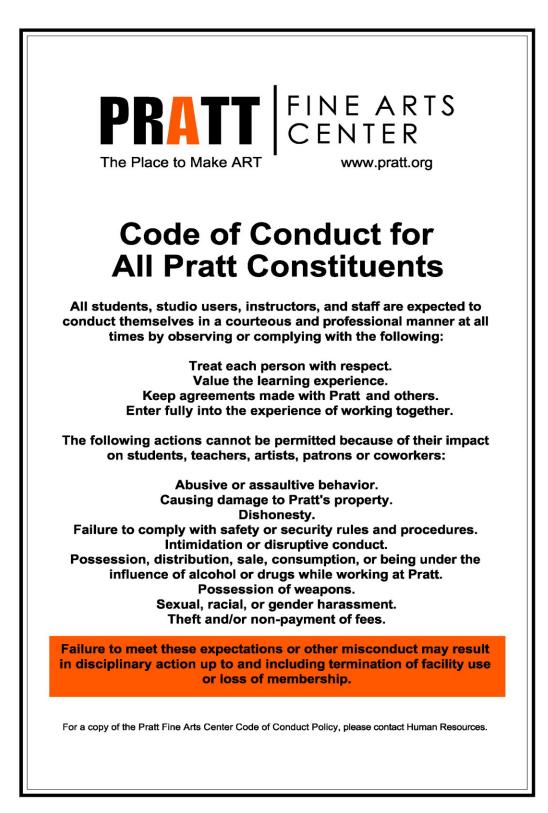
I have read and agree to the policies and guidelines set forth in the Procedure and Policy Handbook for Users. I understand that failure to abide by the policies and guidelines may result in cancellation of my usage privileges. I further understand that damage to equipment and/or facility due to misuse or negligence will be my financial responsibility.

PLEASE PRINT

Name:		
Address:		
Course Title:		
Instructor:		
CO	ONTACT IN CASE OF EMERGENCY	
NAME:		
PHONE #:		
SIGNATURE	DATE	

(for youth under 18, parent or guardian name and signature on waiver required)

Appendix B: Code of Conduct



Appendix C: Acknowledgement Form



STUDIO ARTIST ACKNOWLEDGEMENT FORM

Congratulations on becoming a Studio at Pratt Fine Arts Center!

The Studio Access program at Pratt Fine Arts Center is designed to help practicing artists by offering affordable access to shared studio space and equipment. The program is distinctly unique and is not offered anywhere else in the region.

All of us at Pratt go to great lengths to maintain the studios and make sure that they are being used properly. As a new Studio Artist at Pratt, you now share in that responsibility and we expect that you will treat the facilities with the highest level of care, adhering to all of the standards set forth in the Studio User Guide.

As a Studio Artist with studio access privileges, you are required to read each section of the user guide and comply with its directions. Should you have any questions or concerns about any of the information provided, please discuss them with the appropriate Studio Access Coordinator. Once you are certain that you understand all of the requirements set forth in the guide, sign the acknowledgement below and turn in the form with your Waiver Agreement prior to your first studio access.

By singing below, I hereby acknowledgement that have read the Studio User Guide in its entirety. I assert that I understand the policies, practices and procedures described herein and I commit to consistent and complete compliance.

_____ (Print)

Studio Artist Name

Studio Artist Signature

Date