

Elective Skills Workshop Course

Course Title	Moulding and Casting
Tutor	Briony Marshall
Studio Session Dates	Fridays: 17th January 2025 – 28th March 2025 (Reading week: 17th – 21st February)
Session Times	10:00am - 5pm
Course Code	E2402S012
Studio	Mermaid Court Studio 1
Course Fees	£675
Material costs	£58* (See below)

Please note this elective runs over a longer day of 10am – 5pm due to the duration of the casting processes involved.

Course overview

This course will introduce you to a wide variety of moulding and casting techniques and enable you to start making moulds and casts independently.

You will learn to cast in a variety of materials, including plaster, jesmonite, jesmonite-bronze, pewter and clay slip and will explore colouring/finishing and mounting techniques. By the end of the course you will have created three different types of reusable mould, 2 (single use) waste moulds and five different finished cast sculptures. There are size limitations on the casts you will create during this course, both to keep the costs affordable and to allow us to cover a variety of techniques over the course (but the techniques learnt can be used to create larger casts).

Learning outcomes

Students will be able to:

- Plan and create a plaster cast from a plaster waste mould.
 - Plan and create a two part silicon mould with Jesmonite jacket
 - Create a Jesmonite-bronze cast from a silicon mould.
 - Create a slip mould and cast an object in clay
 - Create a 'mother first'/pour method silicon mould with plaster jacket
 - Cast a wax positive from a silicon mould
 - Cast in pewter using both a rubber mould and a traditional investment waste mould (similar to what is used for bronze casting)
 - Apply finishing techniques to casts
 - Apply safe working practices at all times
- By the end of this course you will have a very good foundation in moulding and casting, you should begin to be able to plan seam lines and be confident to plan your own moulding and casting projects (it is advised that you then apply these skills in your studio practice or your own time to thoroughly embed the learning. It is best to try to do this soon after the course whilst the knowledge is still fresh)

What Level is the course and do I need any particular skills?

No moulding or casting experience is necessary, but you should have some sculptural expertise as we will be manipulating clay and other modelling materials. Hand dexterity and spacial awareness will be of value to the techniques to be learnt.

About your tutors

Briony Marshall MRSS FRSA is a London based sculptor and installation artist. With a background in Biochemistry, she fuses an intellectual/conceptual approach with an intuitive, materials inspired process to develop sculptures that investigate the natural world and man's place in it.

She has developed her moulding and casting skills over the last 20 years, including learning from master mould makers in Tuscany during a residency in a bronze foundry in Pieterasanta, and from the mentoring and support she has received from Pangolin Editions, one of the most respected UK foundries as part of her Artist in Residency year at their London Gallery, Pangolin London.

<http://www.briony.com>

Adele Williams runs ceramic courses and workshops across London, and is also a studio potter creating work from Clay collective. Since setting up Clay Collective with a collective of makers in 2016, they have run workshops at Somerset House and Tate Modern.

Weekly breakdown

Below is a weekly breakdown of what will be covered.

Please bear in mind that this course often requires outputs from one week for the following week, so it would be preferable if you did not miss any of the sessions. If this is unavoidable please let your tutors know in advance so that a suitable plan can be put in place. In the event of unexpected absences the tutor/fellow students might be able to complete required tasks in your absence if you are happy for them to do so, but this cannot be guaranteed.

Wk	Date	Topic/Activity	Location & Tutor(s)	What to bring
1	Friday 17th January 2025	<p>1 Day Plaster Waste Mould</p> <p>We will start the day with quick sketches in clay from a life model and then each select the best sketch to waste mould.</p> <p>From the sketch (roughly fist size) we will create a plaster mould.</p> <p>We will then fill the negative plaster mould with crystacal plaster (a hard plaster) and 'chip out' to produce a finished work.</p> <p>We will finish the day colouring the finished plaster works.</p>	<p>Briony Marshall</p> <p>Mermaid Court Studio 1</p>	<p>Overalls and robust closed toe shoes (to be worn every week, it will be messy)</p> <p>Your own clay tools if you have them to sculpt.</p>
2	Friday 24th January 2025	<p>2 Part Standing Silicon Mould with Jesmonite Jacket</p> <p>Day 1</p> <ul style="list-style-type: none"> - Plan mould - 1 coat of silicon all over (fast catalyst) - Make plaster mould for keys - Plastic shim seams - Silicon layer 2 and 3 w/thixotropic 	<p>Briony Marshall</p> <p>Mermaid Court Studio 1</p>	<p>Bring a sculpture to cast. A standing figure / other form no taller than 40cm high and without too many complicated parts.</p> <p><i>(you will create a reusable silicon mould and make one cast in jesmonite bronze)</i></p> <p>Bring high sided plastic pots that you would otherwise recycle (e.g. fresh soup)</p>

				pots, large yoghurt pots)
3	Friday 31st January 2025	2 Part Standing Silicon Mould with Jesmonite Jacket Day 2 <ul style="list-style-type: none"> - Tidy up rubber - Jesmonite jacket (morning) - Open and clean mould (afternoon) <ul style="list-style-type: none"> - If there is time you may start Jesmonite Bronze cast 	Briony Marshall Mermaid Court Studio 1	Bring high sided plastic pots that you would otherwise recycle (e.g. fresh soup pots, large yoghurt pots)
4	Friday 7th February 2025	Jesmonite bronze cast From the silicon mould made in weeks 2 &3 Gel coat layer with bronze powder Jesmonite + quadraxial fibreglass layers Squeeze After lunch: open mould to reveal cast Patching seams	Briony Marshall Mermaid Court Studio 1	Bring a few really small plastic pots or even the lids from plastic pots (to use to mix up small quantities for patching).
5	Friday 14th February 2025	Slip Casting part 1 AM Making a 1 part plaster mould, in prep for making a clay slip cast after reading week <ul style="list-style-type: none"> -prep object and box for the plaster -mix and pour the plaster -release the mold so it can dry - tidy edges PM Reusable Pewter mould - part 1 <ul style="list-style-type: none"> - Clay wall and keys - Pour red rubber (leave to set at least 24hrs) <ul style="list-style-type: none"> -wrap well with cling film too prevent clay drying out 	Adele Williams AM Briony Marshall PM Mermaid Court Studio 1	AM Bring <ul style="list-style-type: none"> -Apron -gloves if you dont want to touch the plaster -dust masks - a small object to create a mold of. - a plastic tub that is 20cm bigger than your object - in which to make the mould PM Bring a really small sculpture or object to cast (1 - 3 cm long). It should have minimal undercuts as we will be using a very rigid hard rubber. <i>(you will create a reusable mould for lead, pewter or even tin, so can easily create lots of copies of it)</i>

Reading Week

6	Friday 28th February 2025	<p>Slip Casting part 2 AM</p> <p>Taking a clay (slip) cast from the plaster mold you made in week 5</p> <ul style="list-style-type: none"> - Pour liquid clay into the mold - Remove excess clay - Allow object to dry, clean and tidy - Time for multiples? <p>PM Mother-first Casting part 1</p> <p>Day 1</p> <ul style="list-style-type: none"> - Plan mould - Clay wall seams + clay blanket - Plaster 'mother' - PM Remove clean and prep plaster 'mother' - Pour rubber (slow catalyst, leave to set till next week) <p>Reusable Pewter mould part 2</p> <p>Turn over and remove clay</p> <p>Pour second half of red rubber</p>	<p>Adele Williams AM</p> <p>Briony Marshall PM</p> <p>Mermaid Court Studio 1</p>	<p>AM Aprons</p> <p>PM</p> <p>Bring a sculpture to cast. Something fairly small and intricate would be good, but that can be done in a 2-part mould. Make sure no part of it is thicker than 3 cm and its overall length is no longer than 15cm. It could be something the size of fist and about 8cm across, like a small portrait head.</p> <p>It can't be made of soft clay (so either leather hard clay, or wax, plasticine, wood, found objects, etc)</p> <p><i>(you will make a mould of this, then a wax cast then a pewter cast)</i></p>
7	Friday 7th March 2025	<p>Mother-first mould</p> <p>Day 2 AM</p> <ul style="list-style-type: none"> - Turn over mould and remove clay walls- Clay blanket - Second plaster 'mother' - Remove, clean and prep 'mother' - Pour rubber (slow catalyst leave to set till next week) 	<p>Briony Marshall</p> <p>Mermaid Court Studio 1</p>	
8	Friday 14th March 2025	<p>Casting in wax (for pewter) Investment Waste Mould for Pewter</p> <p>(Using the mother first mould created in week 6 and 7)</p> <ul style="list-style-type: none"> - Open moulds, clean up - Melting wax and pouring it into the mould - Chasing seams in wax - Sprue-ing up casts - Coating in investment - Steaming out moulds 	<p>Briony Marshall</p> <p>Mermaid Court Studio 1</p>	<p><i>(Tutor will bring in metal wax syringe)</i></p>
9	Friday 21st March 2025	<p>Pewter Casting</p>	<p>Briony Marshall</p>	<p><i>(Tutor will bring in soldering iron, brass pins and sanding tools)</i></p>

		(Using both the reusable mould AND investment waste moulds created in week 7 and 8) <ul style="list-style-type: none"> - Melting pewter - Casting - Chasing pewter - Soldering pewter if necessary 	Mermaid Court Studio 1	
10	Friday 28th March 2025	Finishing up, Patination and Mounting Day <ul style="list-style-type: none"> - Patination techniques on Pewter - Mounting of any of the finished casts if required - A chance to finish off any works from earlier in the course 	Briony Marshall Mermaid Court Studio 1	Bring any wooden or stone bases you want to use to mount your finished casts.

Sculptures / objects needed

Week 2: A standing figure / other form no taller than 40cm high and without too many complicated parts. This is a good technique to use on a clay sculpture on an armature.



Week 5 am: an object to take a 1 part mold from to them slip cast in clay. Should be between 5 - 10cm overall. Should have a smooth surface (i.e am apple not an orange, ping pong ball not a tennis ball) and not include any 'undercuts', as this will prevent the object being removed from the mold. (I.e half a sphere, not a whole sphere). Should be water resistant.



Week 5 pm: Bring a really small sculpture or object to cast (1 - 3 cm long). It should have minimal undercuts as we will be using a very rigid hard rubber, but can have intricate texture or patterns. Modelling wax or plastiline is a good material to use to sculpture something small. It could become a pendant for a necklace.



Week 6: Something fairly small and intricate would be good, but that can be done in a 2-part mould. Make sure **no part of it** is thicker than 3 cm and its overall length is **no longer than 15cm**. It could be something the size of fist and about 8cm across, like a small portrait head.



Preparation Requirements & Additional Costs

YOU MUST BRING YOUR OWN TOOLS.

You must bring each week the following + the casting kit (below):

- Overalls
- Sensible work shoes that can get stained (no crock, open toes or sandals)
- A notebook for measurements (it will get things spilt on it, so not your best notebook. It's a good idea to start a new notebook for all moulding and casting activities - I have one that I keep for years and look back on past projects regularly when I'm starting a new casting project)
- A scalpel with a fresh sharp blade
- A stanley knife
- A suitable board for the work you are casting
- Some extra plastic pots for measure things in (see each week if necessary and what type)
- Safety goggles (if you wear glasses get ones that fit easily over them)
- Dust masks (a pack of 5 at least)
- Disposable gloves: please get a pack of 100 disposable gloves of your own in the correct size, you can get either nitrile (4mm is thick enough in blue or black) or vinyl (2.5 mm is fine, generally white), both work fine, can be ordered online from <https://www.screwfix.com/>

You must purchase a moulding and casting student pack for the course and bring each week:

The kit consist of:

- A tiranti mixing spatula
- A paint kettle
- 2" laminating brush
- ½" laminating brush
- Sanding sponge

This kit costs £8

Material costs of the course:

- Plaster (fine and crystal)
- 1.8 kg normal rubber
- 250g red rubber
- 2 x 50cm plastic shim
- 1 kg jesmonite
- 500g Bronze powder
- Quadraxial fibreglass (1.5m x 25cm)
- 1 kg pewter
- Sundries (thixotropic, tape, scrim, wax, chopped strand)

Material costs £50.00.

Total material costs and kit £58.

Resources & Further Reading

Please note reading lists are suggested, not required.

Author	Year	Title	Publisher	Location
Alec Tiranti Ltd		Silicone Rubber Booklet & Polyester Resin Booklet	Alec Tiranti https://www.tiranti.co.uk/Products/003d001d0006	
Edward FOLKARD FRSS		Ciment Fondu Booklet	Alec Tiranti https://www.tiranti.co.uk/Products/003d001d0006	
Martin SHARPE:		Plaster Booklet	Alec Tiranti https://www.tiranti.co.uk/Products/003d001d0006	
Nick Brooks	2011	Advanced Mouldmaking and Casting	The Crowood Press	
Jean-Pierre Delpech and Marc-Andre Figueres	2017	The Mouldmaker's Handbook	Herbert Press	
Wilburt Feinberg (Author), Jim Byrne (Illustrator)	1983	Lost-wax Casting: A practitioners manual	Practical Action Publishing	
Briony Marshall &Valentina Fogher	2010	The Brian Mercer Bronze Casting Residency 2009 at the Fonderia Artistica Mariani Pietrasanta	https://briony.com/works-for-sale/bronze-casting-residency-catalogue/	

Other useful resources (websites, galleries etc)

Jesmonite Guide:

<https://jesmonite.com/download?file=files/jesmonite-user-guides-2021-132/ac100-user-guide.pdf>

Suppliers of Moulding/Casting materials and tools:

<https://tiranti.co.uk/>

<https://jesmonite.com>

<http://www.fiints.co.uk/content/>

<https://www.notcutt.co.uk/>

<https://modelshop.co.uk/Shop/Cast-Mould?top=120&orderby=1>

Glass Galleries:

<https://www.vam.ac.uk/-glass-galleries>

<https://www.vesselgallery.com/> glass and ceramic gallery

Who can I contact for further information?

General information and advice on courses at Art Academy London is available from the main office, open Monday to Friday 09:00 – 17:00 during term time.

Tel: +44 (0) 20 7407 6969 or email our Reception at info@artacademy.ac.uk

Location

Art Academy – Bankside Campus

185 Park Street

London SE1 9BL

The Art Academy is conveniently located minutes away from London Bridge (Northern and Jubilee lines, National Rail services), Southwark (Jubilee Lines) and Borough (Northern line) underground stations. Please [click here](#) for a map, what three words input.

Just moments walk from the Thames, Art Academy London is also ideally located for access to:

- White Cube
- Tate Modern
- The Globe
- Bankside Gallery

If you would like to make the most of the area a member of the team will be happy to advise you on areas of interest locally.

Refreshments & Facilities

All students have access to the common area located in the basement level of the building, here you will have use of a fridge, kettle, microwave and eating area.

There is a wealth of supermarkets, shops and cafes in the area as well as the world-famous Borough Food Market, fifteen minutes walk away.

Disabled Access

The campus has an elevator and has no threshold from the street level providing full step free access. We make every effort to accommodate students' access requirements, if you have mobility issues please speak to a member of the Academy team before your course starts.

Further Details

- You will need to have paid in full for your class before the first session of your class, your place is not guaranteed until we have received payment.
- If you purchased a materials pack online this will be given to you on the first session of your course upon your arrival.
- Ensure that you wear appropriate clothing, as you may get messy!
- All artwork at the Academy MUST be taken home at the end of the course.
- Please ensure that your mobile phone is switched off, or is on silent, during the class.
- Please read the Health and Safety Guidelines carefully, provided at the beginning of your course.
- If you wish to join any class for the next term please contact the office to re-book. Classes are becoming increasingly popular, so please book early in order to guarantee your place.
- If you have any further queries let us know and we will do our best to resolve them. Thank you for your cooperation and we look forward to seeing you.