

## COURSE DETAILS – LONG WEEKEND LW0298

TITLE: ENAMELLING ON PRECIOUS METALS

TUTOR: JOAN MACKARELL

LEVEL: INTERMEDIATE/ADVANCED

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### GENERAL CONTENT OF COURSE:

This course is designed for those with some experience of working with metals. It aims to provide a framework both for beginners in enamelling and those with some enamelling experience to learn basic techniques or to improve their skills and develop their designs in a personal manner.

All techniques of enamel shall be shown: cloisonné, champlevé, plique-à-jour and the use of foils. It is hoped that students will accomplish several pieces where they have explored aspects of enamel which excite them. On the first evening we shall look at examples of different techniques and set up individual projects for each student to work on for the duration of the course. As time is short it would be useful if all participants could bring some jewellery pieces already made up on which to work.

Technical worksheets, list of suppliers and videos will be available, and emphasis is given to the resourcing and development of ideas.

**Health and Safety:** The tutor instructs students in health and safety issues relevant to this course. Students may work unsupervised on agreed projects once they have satisfied the tutor as to their competence. There may be restrictions on the equipment available to students in the tutor's absence. Students should note that the kilns must not be used in the tutor's absence. All Personal Protection Equipment, apart from footwear, is provided by the College.

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### MATERIALS FOR THE COURSE:

#### ADDITIONAL CHARGE:

On this course the tutor will supply enamels, gold/silver foil and silver stampings on sale or return basis. This charge should be paid to the **tutor** before the end of the course, by cash or cheque.

#### These items will be available for purchase in the College Shop:

- Scorpers for carving for champlevé enamel
- half round graver no. 4
- flat gravers nos. 6, 10, 14
- spitstick no. 4 or 6
- mushroom graver handles (short)
- fine paint brushes 0 or 1
- carborundum sticks
- copper sheet
- silver sheet – up to 1mm thick
- art materials

#### Please bring any of the above, if you have them, and in addition:

- Clean cotton handkerchief or paper kitchen towel (not fluffy)
- Apron/overall
- Any jewellery tools especially fine tweezers and scissors
- Painting palettes or flat containers (*lids*)
- A fine pointed paintbrush
- Any enamels
- Sketchbook ideas and drawing materials
- Any pieces of enamel work you have created and wish to discuss. Prepared pieces to enamel if you can as time is short
- Silver sheet at least 1.2 mm thick (if you wish to carve bring 1.3 mm thick silver)

## GUIDANCE NOTES ON 'DESIGNING WITH ENAMEL'

Enamel should be thought of as an integral part of your design not an add-on decorative effect. Certain points must be considered when designing your piece and when deciding how it is to be fabricated/constructed/put together.

### CONSTRUCTION OF PIECE AND THICKNESS OF METAL

- If the enamelled section has to remain flat without warping think about:
  - The thickness of the metal – can it be a heavier gauge? [Small pieces (silver) need to be 0.8–1 mm thick. Larger pieces (silver) need to be 1.2–1.5 mm.]
  - Can the piece be counter-enamelled?
  - Can the piece be domed/formed slightly to make it into a 'stronger' shape?
- Highly formed shapes can be difficult to enamel. Enamel will ping off sharp bends/angles, thin wires or long points.
- Can the piece be supported easily and stably when fired in the kiln without damaging the enamel, or delicate parts/wires/settings/fittings?

### SOLDERING AND FIRESTAIN

Enamel and solder do not like one another. Do not have solder joints across areas that are to be enamelled as this can cause bubbling of enamel, discolouration of enamel, or enamel pinging off.

- Only use HARD or enamelling grade solder. Ensure that the joint is neat fitting and has a good fillet of solder without pinholes. This must be completed before enamelling. If areas to be enamelled are not to be subsequently recessed, textured, or filed and papered thoroughly, protect the metal surface from FIRESTAIN by coating with either:
  - A thick layer of creamy borax
  - Argotect
  - Boracic acid mixed with meths
  - (This is not so necessary if ONLY opaque enamels are to be used)
- If the piece has to be annealed during construction and the areas to be enamelled are not to be subsequently recessed, textured or filed and papered thoroughly, protect the metal surface from FIRESTAIN as above.

### FINDINGS AND FITTINGS

Try to think of constructing the piece in a way that only necessary parts have to be put in the kiln (snap blades, necklace/bracelet clasps, cufflink fittings, belt buckles, box hinges etc will get soft/annealed during enamelling which can be problematic).

- Regard the enamelled section:
  - As a stone that can be 'set' in a bezel after enamelling
  - As a jointed unit that can be linked up after enamelling
  - Or as a part that can be attached to the main piece by: riveting (do not use wire; use thin-walled tubing), screwing or pinning (protect the enamelled surface from scratches by covering with masking tape)
- Brooch pins will get soft/annealed during enamelling so pin up brooch fittings after enamelling otherwise they will get soft/annealed. Think of positioning them so that the enamel will not be damaged when pinning up (protect the enamelled surface from scratches by covering with masking tape).

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- Ear posts and wires will get soft/annealed during enamelling. Bend up ear-wires after enamelling to harden. Adjust the design so that the enamelled section becomes a 'drop' to be linked on after enamelling or regard the enamelled section:
  - As a stone that can be 'set' in a bezel after enamelling
  - As a jointed unit that can be linked up after enamelling
  - Or as a part that can be attached to the main piece by: riveting (do not use wire; use thin-walled tubing), screwing or pinning (protect the enamelled surface from scratches by covering with masking tape)
  - for earring posts use 9 carat gold pin wire only, even with silver earrings

## STONE SETTINGS

Stone settings placed close to enamel can be problematic. The settings/bezels may get in the way when applying and stoning enamel. Will setting stones cause the enamel to crack? Maybe make separate settings to be 'brought on' after enamelling by: riveting (do not use wire; use thin-walled tubing), screwing or pinning (protect the enamelled surface from scratches by covering with masking tape)

*And lastly:*

DON'T REGARD ALL THESE POINTS AS PROBLEMS – JUST THINK ROUND THEM AND BE CREATIVE!

Joan MacKarell

## **COURSE TIMETABLE** (unless otherwise stated above or agreed with the tutor during the course)

Course timetable for 2–9 day courses – each course starts with a welcome session on the first evening of the start date of the course and is followed by 2–9 days depending on the length of the course.

<b>Arrival Day</b>	From 4.00pm  7.00 8.15–9.15	Arrival for residential students. Non-residential students please arrive by 6.45pm for welcome chat and dinner. Dinner. First teaching session.
<b>Daily Timetable</b>	<b>9.15am</b> 10.30 12.45pm <b>2.00pm</b> 3.30 5.00 7.00 8.15	<b>Morning classes.</b> Coffee. Lunch. <b>Afternoon classes.</b> Tea. Classes finish. Dinner. Evening working – students may have evening access to certain workshops in the absence of their tutor, but only with their tutor's permission and provided it is safe to do so.
<b>Departure – last day</b>	10.00am 3.00pm 3.30	Residential students are asked to vacate rooms. Classes finish. Tea then departure.