

# LECTURE

## CLAY FIRING

Tutor: Jann French,  
*BA hons. Workshop Ceramics. 1st Class*

This is a comprehensive technology lecture suitable for students of any clay practice, beginners to advanced. As firing is a crucial part of making clay objects; an understanding of the technical side helps you get to grips with your material, so you can make more informed design choices - even for those whose work is usually fired by a college technician.

This workshop is also for people wanting to learn how to fire kilns and those buying their first kiln.

In general this lecture provides technical insight into ceramics and ceramic processes. You will learn about the changes ceramic materials undergo at different temperatures and exactly what happens (or can happen) to your work in the kiln. Gives you the science, theory and knowledge to confidently pack and fire kilns and how to prolong the life of the equipment.

~

Comprehensive notes will be provided but do bring pen and paper to take notes. For the tea break; bring or buy local refreshments.

### TOPICS COVERED: -

#### What Happens to Clay in the Kiln?

How the clay molecule changes in the heat. What material it turns into, when, and what the various properties/attributes are of the different ceramic materials made at different temperatures i.e. earthenware, stoneware, porcelain.

Explains the vulnerable stages providing a good basis to understand how to make for the kiln and see your work through the firing process.

#### The Practical Application of Ceramic Materials

Knowing why certain materials are used for certain purposes enables you to decide what type of ceramic material might best suit the needs of a specific project.

Factors and handy hints to consider when selecting clay bodies - Texture, grog, body flux, reduction, oxidation.

Low fired ceramics, earthenware, industrial earthenware, high temperature ceramics . porcelain, stoneware, bone china.

What minerals make up clay bodies and glazes, including some recipes.

The application of temperature to pottery function i.e. ovenproof and flame proof ceramics.

#### How to Pack, Fire and Maintain Kilns

Getting the most out of the chamber space while considering temperature flow.

Speed, temperature, bungs, pyrometric cones, firing logs, troubleshooting.

Temperature gauges, shut off switches and computers.

Kiln, kiln furniture and bat maintenance

#### Things That Can Happen to Your Work in the Kiln & What You Can Do About It

Warping, twisting, slumping, melting, dunting.

### About Jann French:

I am a maker of footwear, ceramics, art, sculpture, baskets, books, raw food, wool-lies, other stuff and round things. My degree is in ceramics. I have worked as a film editor, potter, sculptor, carpenter, teacher, decorator, cleaner, SCUBA instructor, events organiser, arts administrator, community art centre manager and book-keeper. I volunteer on committees, at co-ops, music festivals and organic farms. Born in England, now an Australian citizen. I've also lived in South Africa and studied in Israel.

I trained in art from my earliest school days. I can paint and draw but prefer working in 3-dimensions. Traditional trades and crafts really blow my hair back. I swoon at things well-made handmade because I think they radiate more charm, heart, strength, usefulness, quality, depth, beauty, individuality etc. And essentially - I find handmade things much more enjoyable and comfortable to live with.

### Workshops and Private Lessons:

I am available for private teaching, tutoring or coaching in pottery, sculpture, art, kiln firing, basket weaving, bookbinding and knitting.

I teach workshops on a variety of art and craft skills throughout the year. My services, workshops and lectures are available for hire by companies, schools and organisations as well as individuals.