



UNIVERSITI TEKNOLOGI MARA

EAD436: ETCHING

Course Name (English)	ETCHING APPROVED
Course Code	EAD436
MQF Credit	2
Course Description	This courses offer a theory and technical knowledge of etching process. The students will be assisting to do hands-on practice of etching process in order to developing their basic skill in metalsmithing fabrication
Transferable Skills	At the end of the course, student should be able to understand basic knowledge of etching techniques, demonstrate skill of etching process in metalwork fabrication and apply the knowledge of etching process in creating ideas of metalsmithing design.
Teaching Methodologies	Lectures, Demonstrations, Practical Classes, Presentation, Workshop
CLO	CLO1 Understand basic knowledge of etching techniques. CLO2 Demonstrate skill of etching process in metalwork fabrication. CLO3 Apply the knowledge of etching process in creating ideas of metalsmithing design.
Pre-Requisite Courses	No course recommendations
Topics	
1. 1. Overview of the course. 1.1) 1.1. Objective of the course 1.2) 1.2. History of etching techniques in metalwork 1.3) 1.3. Introduction to tools and equipment 1.4) 1.4. Safety and Precautions	
2. 2. Common acid used for etching process 2.1) 2.1 Hydrochloric Acid 2.2) 2.2 Nitric Acid 2.3) 2.3 Sulphuric Acid 2.4) 2.4 Aqua Regia	
3. 3. Common material used for etching process 3.1) 3.1 Copper 3.2) 3.2 Brass 3.3) 3.3 Silver 3.4) 3.4 Gold 3.5) 3.5 Steel	
4. 4. Manual etching process: Workshop Project 1 4.1) 4.1 Creating design 4.2) 4.2 Transferring the design from paper to metal 4.3) 4.3 Preparing the acid solutions 4.4) 4.4 Agitation of the etchant 4.5) 4.5 Inspection of the etch 4.6) 4.6 Resist removal with solvent	
5. 5. Photo etching process: Workshop Project 2 5.1) 5.1 Prepare design for photo etching 5.2) 5.2 Double sided photo etching 5.3) 5.3 Cleaning up photo etched pieces	

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Sample of experiment : individual project	30%	CLO2
	Final Project	Final Product: Individual Project	40%	CLO3
	Individual Project	Research information and report writing.	30%	CLO1

Reading List	Recommended Text
	<ul style="list-style-type: none"> • Stephen O'Keeffe 2003, <i>Tips and Shortcuts for Jewellery Making</i>, First edition Ed., A & C Black [ISBN: 0713665076] • Jinks McGrath 2007, <i>Jewellery Making</i>, Apple Press [ISBN: 184543238X] • Anastasia Young 2008, <i>The Jeweller's Techniques Bible: The essential guide to materials, gemstones and settings</i> Page One Publishing Private Limited • Anastasia Young 2010, <i>The Workbench Guide to Jewelry Techniques</i>, First edition Ed., Thames and Hudson [ISBN: 1596681691] • Chaterine Brooks 2007, <i>Magical Secrets About Line Etching & Engraving: The Step-by-Step Art of Incised Lines</i>, DVD edition Ed., Crown Point Press [ISBN: 1891300202] • Ruth Rae, Kristen Robinson 2013, <i>Making Etched Metal Jewelry</i>, First edition Ed., North Light Books [ISBN: 144032705X]

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources