

114-1 Full Curriculum of Da-Yeh University

Information			
Title	Materials Science for Art	Serial No./ID	1024 /PDD3111
Required/Credit	Optinal /3	Time/Place	(Fri)567 /G401-2
Language	Chinese/English	Grade Type	Number
Lecturer /Full- or Part-time	SHUN-HSING HUANG /Full-time	Graduate Class	Non-graduating Class
School System /Dept /Class, Grade	/Department of Plastic Arts /Class 1, Grade 3		
Office Hour / Place	(Tue) 12:00~13:20, (Wed) 12:00~13:20, (Fri) 12:00~13:20 / G206		
Lecturer	n.a.		

Introduction

Cultivate an experimental mindset and continuously accumulate insights through documentation, discovering new perspectives and possibilities that become valuable cornerstones for individuals or teams.

Learn about Arduino and apply it to everyday life using online resources, leveraging personal creativity and teamwork with complementary roles. With the right tools, collaboratively execute and complete projects.

Outline

Common physical and chemical materials in daily life

Material experiment testing and documentation

Introduction to Arduino






Basic circuit knowledge



Teamwork and project execution

Prerequisite

Visit more exhibitions and view more works.

The Relationship Between Courses and Departmental Core Competencies and Basic Skills

-  1.ability to apply professional arts/design knowledge
-  2.ability to apply techniques, skills, and modern tools necessary for arts/design practice
-  3.ability to integrate arts/design theories and techniques
-  4.ability to identify, analyze, and respond to complex arts/design problems
-  5.ability to manage projects, communicate effectively, respect for diversity, and function on interdisciplinary teams

-  6.knowledge of contemporary issues; an understanding of the impact of arts/design practices in a environmental, societal, and global context; and the ability and habit to engage in life-long learning
 -  7.understanding of professional ethics and acknowledgment of social responsibility
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Teaching Plan						
Core Capability	Weight(%) 【A】	Ability index(Performance Indicators)	Teaching Methods	Assessment and Weight	Core Competency Learning Outcomes 【B】	Final Exam Grades 【C=B*A 】
1.ability to apply professional arts/design knowledge	10	.	Lecturing	Midterm Exam: 30% Assessment on Teamwork: 20% Oral Report: 20% Class Notes: 30%	Total: 100	10
2.ability to apply techniques, skills, and modern tools necessary for arts/design practice	15	.	Lecturing	Quiz: 30% Assessment on Teamwork: 20% Class Notes: 30% Oral Report: 20%	Total: 100	15
3.ability to integrate arts/design theories and techniques	20	.	Group Work	Quiz: 20% Class Notes: 30% Assessment on Teamwork: 20% Thoughts on Topics: 30%	Total: 100	20
4.ability to identify, analyze, and respond to complex arts/design problems	15	.	Group Discussion	Quiz: 20% Homework Assignment: 30% Class Notes: 30% Assessment on Teamwork: 20%	Total: 100	15
5.ability to manage projects, communicate effectively, respect for diversity, and function on interdisciplinary teams	20	.	Group Work	Midterm Exam: 30% Homework Assignment: 30% Assessment on Teamwork: 20% Class Notes: 20%	Total: 100	20

6.knowledge of contemporary issues; an understanding of the impact of arts/design practices in a environmental, societal, and global context; and the ability and habit to engage in life-long learning	15	.	Lecturing	Midterm Exam: 30% Assessment on Teamwork: 30% Class Notes: 20% Oral Report: 20%	Total: 100	15
7.understanding of professional ethics and acknowledgment of social responsibility	5	.	Lecturing	Final Exam: 30% Homework Assignment: 30% Assessment on Teamwork: 20% Class Notes: 20%	Total: 100	5

Grade Auditing

Class Notes: 26%

Assessment on Teamwork: 21.5%

Midterm Exam: 13.5%

Homework Assignment: 12%

Quiz: 11.5%

Oral Report: 8%

Thoughts on Topics: 6%

Final Exam: 1.5%

Book Type (Respect intellectual property rights. Please use official textbooks and do not illegally photocopy others' works.)

Book Type	Book name	Author
Reference Books	油畫材料學(修訂版)	陳淑華

Lesson Plan

Weeks	Content	Teaching Methods		
1	Course Introduction & Intellectual Property Protection (use legitimate textbooks only) & Traffic safety Propaganda & Gender equality education promotion	Lecturing、	Group Discussion、	Group Work
2	A Brief History of Painting Techniques: Traditional Oil Painting Techniques	Lecturing、	Group Discussion、	Group Work
3	A Brief History of Painting Techniques: Modern Oil Painting Techniques	Lecturing、	Group Discussion、	Group Work
4	Painting Supports: Types and Characteristics	Lecturing、	Group Discussion、	Group Work
5	Painting Supports: Preparation Methods	Lecturing、	Group Discussion、	Group Work
6	Priming: Types and Characteristics	Lecturing、	Group Discussion、	Group Work
7	Priming: Formulas and Methods Paints: Properties and Labeling	Lecturing、	Group Discussion、	Group Work
8	Midterm Exam	Lecturing		
9	Paints: Grinding and Selection Painting Oils Driers	Lecturing、	Group Discussion、	Group Work
10	Varnish: Types of Resins and Dissolution Methods Varnish: Types and Application Methods	Lecturing、	Group Discussion、	Group Work
11	Tools: Brushes and Painting Knives Tools: Palettes and Oil Cups Storage and Maintenance	Lecturing、	Group Discussion、	Group Work
12	Wax - 1	Lecturing、	Group Discussion、	Group Work
13	Wax - 2	Lecturing、	Group Discussion、	Group Work
14	Wax - 3	Lecturing、	Group Discussion、	Group Work
15	Wax - 4	Lecturing、	Group Discussion、	Group Work
16	Wax - 5	Lecturing、	Group Discussion、	Group Work

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| 17 | Visits and Experiences and Flexible Teaching/Learning & Flexible Teaching/Learning | Flexible Teaching - Independent Action,
Flexible Teaching - Communication and
Interaction、 Flexible Teaching - Social
Participation |
| 18 | Visits and Experiences and Flexible Teaching/Learning & Flexible Teaching/Learning | Flexible Teaching - Independent Action,
Flexible Teaching - Communication and
Interaction、 Flexible Teaching - Social
Participation |