

National Chiayi University Syllabus

Department of Wood products science and furniture engineering, Spring
Semester, Academic Year 2010

Course : Wood-based products and life	Credit :	Hours :
Class :	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Elective
Instructor : Chen, Po-Jang	E-mail : bjchen@mail.ncyu.edu.tw	
Office : A02-213	Office Hours :	

I. Course Description :

The wood cells have abilities of adsorption and adjustment to the living environment. Because of their porous structure which has lower thermal conductivity, they are able to keep us warm in winters and cool in summers.

To compare with the other materials, woods are able to recycle, save energy, and attribute to the environmental safety. Using wood-based materials properly has positive meanings to decrease Greenhouse effect on earth conducted from concentration of carbon dioxide.

II. Teaching Objectives :

The performances on the combination of temperature, relative humidity, wind speed and thermal radiation and so on are important elements to a safe and comfortable life in habitation which are affected by the furnishing, decorations and interiors design. Therefore, wood-based materials are becoming more valuable in human lives and environment. This program will establish a concept of wooden environment.

III. Class Schedule (~day, periods?~?)

Week	Date	Topic/Activity	Reading/Assignment
1		Wood-based materials ; Introduction	
2		Types of wood-based material	
3		“	
4		Soft wood and hard wood	
5		“	
6		Properties of wood-based material	
7		“	
8		Advantages and defects	
9		“	
10		Where and how to use ?	
11		“	

12	How to choose ?
13	Environmental conditioning of wood-based materials
14	The influences of interior environment Wood-based materials for interior decoration
15	Conditions of interior decoration
16	Relations between human beings and interior materials
17	Comparison with the others
18	Specialties and advantages

IV. Evaluation :

Attendance and assignment : 30% ; Midterm assignment : 30% ; Final assignment : 40%

V. References :

- 1、王松永、丁昭義，(1984)，林產學(上冊)，台灣商務印書館。
- 2、王松永、卓志隆，(1991)，木材內裝對室內溫度與濕度調節效應，林產工業 10(2)：1-25
- 3、王松永、卓志隆，(1992)，木材內裝對室內溫度與濕度調節效應(二)，中華林學季刊 25(3)：109-145
- 4、林憲德，(1994)，生活環境科學系列之一--現代人類的居住環境，pp.169，胡氏圖書出版社