COURSE OUTLINES

COURSE TITLE: WOODWORK MATERIALS
COURSE CODE: DTE 114
CREDITS 2
LEVEL 100
SEMESTER: ONE
COURSE LECTURER: STEPHEN JOBSON MITCHUAL

COURSE OBJECTIVE

Solid woods Veneer and plywood’s are no longer the only material used in woodworking. Plastics, metals, glass, Ceramics, leather etc are all currently included as industrial materials for wood works. This course is designed to create an in-depth understanding of physical and working properties of wood and wood related material as well as the way theses properties influence selection and usage. This awareness is of prime importance to the designer (students) in this ability to identify and select the right types of material for project in woodworks.

AREAS OF COVERAGE

i. Forest and Forest Trees
ii. Hardwood and softwood
iii. Gross features of wood
iv. Identification of some commercial tropical timbers, their physical; and strength properties
v. Moisture in wood
vi. Density of wood and it’s practical significance
vii. Seasoning and preservation of wood
viii. Defect in timber and its effect on wood utilization
ix. Manufactured Boards
x. Wood related materials(Plastics, Fasteners, Adhesives Glass and Ceramics etc
xi. Wood Adhesives
METHODOLOGY

This course is practical biased and will be taught through problem solving activities. A variety of methods shall therefore be used to teach the course. These include:

- Lecture
- Demonstration
- Discussion
- Group presentation
- Educational visit
- Practical activities

MODE OF ASSESSMENT

The assessment shall be in the form of end of semester examination and continuous assessment. The end of semester examination will attract 60% whilst the continuous assessment will constitute 40% of the total marks.

REFERENCES

COURSE OUTLINE: WOODWORK TOOLS AND PROCESSESS
COURSE CODE: DTE 122
CREDIT HOURS: 2
LEVEL/: 100
SEMESTER: TWO
COURSE LECTURER: STEPHEN JOBSON MITCHEUAL

COURSE OBJECTIVE

The use of hand tools to create wood product play vital role in woodworks. The understanding of the interaction between woodwork tools and the solid wood is also important. This course will introduce student to the safe and correct use as well as the application and maintenance of traditional and modern woodworking hand tools. The course will also cover woodwork joints. Students will complete a variety of hands on shop project using these tools and joints.

AREAS OF COVERAGE

A woodwork hand tools

Holding and supporting tools
Bench clamps, bench vices, bench stop, bench hooks miter boards etc

Geometric tools
Measuring tools, marking out tools, and setting out tools.

Cutting and Boring tools Saws, planes, chisels planes

Percussion and impelling tools

- Woodworking Joints
- Widening Joints and their construction
- Framing Joint and their construction
- Lengthening Joints
- Angle Joints

METHODOLOGY

This course will be taught through practical problem solving activities. It should not be taught as an isolated theory.

- Lecture
- Discussion
- Demonstration
- Fieldstrips
- Brain storming
MODE OF ASSESSMENT

The assessment shall be in the form of end of semester examination and continuous assessment. The end of semester examination will attract 60% whilst the continuous assessment will constitute 40% of the total marks.

REFERENCES:

COURSE TITLE: WOOD MACHINING
COURSE CODE: DTE 234
CREDITS HOURS 2
LEVEL 200
SEMESTER THREE
COURSE LECTURER STEPHEN JOBSON MITCHEAL

COURSE OBJECTIVE

This course is designed to equip students with the knowledge and skills involved in the use of Woodwork machines. The course will also emphasis the need to observe workshop safety measures when using the machines.

AREAS OF COVERAGE

- Circular saw
- Band saw
- Surface Planer
- Thicknesser
- Spindle moulder
- wood lathe
- Mortise
- Portable machine tools

TEACHING METHOD

This course is practical biased and will be taught through practical activities. A variety of teaching methods will be adopted. These include;

- Lecture
- Demonstration
- Group project work
- Group Project
- Presentation/discussion
- Industrial visit
MODE OF ASSESSMENT

Both continuous assessment and end of semester examination will be used to evaluate student’s performance.

Continuous assessment - 40%
End of semester - 60%

Any student (or a group of students) who fails to participate in or submit their project work will be given incomplete results. Students are advised to submit their cutting list to the workshop assistants by the end of 5th week of the semester.

REFERENCES:


CURRICULUM VITAE

Name: Stephen Jobson Mitchual
Nationality: Ghanaian
Sex: Male
Marital Status: Married
Date of Birth: 30th December 1968
Postal address P.O. Box 1277, Kumasi
Email address smitchual@yahoo.com
Telephone number 024-4248327 / 020-5111915

EDUCATIONAL BACKGROUND

<table>
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<tr>
<th>INSTITUTION</th>
<th>COURSE</th>
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<tr>
<td>Kwame Nkrumah University of Technology &amp; Science and Technology</td>
<td>Wood Technology &amp; Management</td>
<td>M.Sc</td>
<td>June 2002</td>
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<td>CCASSIG</td>
<td>ACCA</td>
<td>ACCA Level 1 &amp; Part of Certificate Level</td>
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<td>University Cape Coast</td>
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<td>1997-1998</td>
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<tr>
<td>Kwame Nkrumah University of Science and Technology</td>
<td>Agricultural Engineering</td>
<td>B.Sc (HONS)</td>
<td>1989-1993</td>
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<td></td>
<td>Chemistry Certificate</td>
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JOB EXPERIENCE

Five years lectureship at the University of Education, Winneba (Kumasi Campus)

Specific activities

- Lecturing of Woodworks at Level 100, 200, and 300; 4 year B.Ed. Technology Education.
- Lecturing of woodwork at level 300 and 400; 2 year B.Ed Voctec Education.
- Supervising of student project work.
- Supervising of student on teaching practice.
- Eight year teaching experience with Ghana Education Service.
- Six months industrial attachment at Fabi Timber Ltd. 2000
- Six weeks industrial attachment at wiafe Brothers Furniture Ltd. 1999
- Six weeks industrial at Forest Inspection Department. 1999
- Six weeks vacation training on maintenance, repairs and operation of farm machinery at Kpong farms. 1991
- Two year job experience with primary health care team, Central Region 1987-1989

PUBLICATION

Journal and Articles


Conference and Seminar Paper


Unpublished Books and Papers

Mitchual S.J Banahene N.O, F. Donkor (unpublished) Relationship between teacher’s self-efficacy and length of teaching experience for professional and non-professional teachers.

Wood work Technology  I- TVET Distance learning manual (Submitted for publication)

Wood work Technology  IV- TVET Distance learning manual (Submitted for publication)

Dissertations


WORKSHOP ATTENDED

Workshop on Open and Distance Leaning administration for UEW TVET tutors and support staff. Organized by Department of Technology Education 16th -18th November 2007.

Workshop for teaching basic Wiki editing skills for teachers & educators Organized by Commonwealth of Learning at IEDE 26th February – 2nd March 2007

Workshop for teaching basic Wiki editing skills for teachers & educators Organized by Commonwealth of Learning at IEDE 22nd -26th January 2007.

One week workshop on editing of distance learning materials. Organized by Department of Technology Education December 2005.

One week workshop on international research management. Organized by the society of Research Administrators International at IEDE 14th – 18th March 2005.


Four days ICT workshop on the designed of website and a multimedia with power point from 2nd -6th February

Three days entrepreneurship seminar organized by NBSSL. 15th -17th July 1993.
RESEARCH INTEREST

The use of lesser used timber species (LUS) for structural development

- Wood machining
- Timber mechanics
- Issues in Technology Education

ON-GOING RESEARCH

Poverty reduction in rural communities in Ghana through application of lesser used timber species (LUS) for development of structures.

Characterisation of durability properties of stem wood and branch of some tropical hardwood p Species.

Teacher’s self-efficacy and length of service for professional and non-professional teachers.

The use of rubber tree planted in Ghana as a raw material for furniture production

SERVICE TO COMMUNITY

- Patron, Brong Ahafo Student Union (BASU). UEW-Kumasi Campus. 2006 to date.
- Patron, Assemblies of God Campus Ministry UEW-Kumasi 2005 to date.
- Chairman of a committee to investigate an alleged copying of long essay to two students. 2006
- Chairman of a committee to vet document of first year student. 2006
- A member of a committee to evaluate the faculty of Technology Education 2006
- A member of Faculty of Technology Education, project proposal writing committee 2005 to date.
- Academic counselor tech 2a 2006-2007
- Academic counselor tech 2a 2005-2006
- Academic counselor Voctech 1 &11 2004-2005
- Coordinator woodworks units 2004-2007
- Chairman, committee of enquiry into an alleged financial malfeasance by GNATOC chairman, college of Technology of Education UEW. 2004.
- A member of a committee of enquiry into an alleged examination malpractice.2004
- Representative of Technology Education on Business Education Department Board 2003-2004
- Secretary to welfare association of the Technology Education Department. 2004

OTHER POSITION HELD

- Secretary, staff welfare association, Winneba Secondary School 1996-1998
- Secretary, men’s ministry, Assemblies of God church Winneba 1995-1998
- A member of the planning committee of Unity Hall KNUST, Silver Jubilee 1993
- Organizing secretary, village evangelism wing of Inter Halls Christian Fellowship

REFREES

Prof Steve Sobotie  
Principal  
College of Technology Education  
University of Education Winneba  
Kumasi Campus- Ghana

Prof Reynolds Okai  
Dean  
Faculty of Technology Education  
University of Education, Winneba  
Kumasi Campus-Ghana.

Mrs. Martha Danso  
Head of Department  
Department of Technology Education  
Faculty of Technology Education  
University of Education, Winneba  
Kumasi Campus - Ghana