

Basic Principles in Occupational Hygiene

Notes and Lesson Plans

Day 3

Lesson plan: Section 11 – Asbestos

Aims: To provide an overview of the hazards associated with asbestos, where it has been used and how it should be controlled.

Objectives:

- Describe the types and origins of asbestos
- Describe Where asbestos has been used
- Describe how it is controlled

Time (mins)	Activity	Resources
60	Lecture by tutor explaining the concepts described in the course manual.	PowerPoint

Lesson plan: Section 12 – Biological Hazards

Aims: To provide an overview of the main biological hazards and their effects on humans

Objectives:

- Describe the main biological hazards encountered and their health effects.

Time (mins)	Activity	Resources
10	Ask students to list biological hazards and describe their health effects	Flipchart/Whiteboard
60	Lecture by tutor explaining the concepts described in the course manual.	PowerPoint

Lesson plan: Section 13 – Noise

Aims: To provide an overview of the physics of sound and units of measurement, basic physiology of the ear and the effects of noise.

Objectives:

- Provide awareness of the physics of sound and units of measurement
- To provide an understanding of the physiology of the ear and the effects of noise on hearing
- To know the ways in exposure to noise can be controlled

Time (mins)	Activity	Resources
15	Introductions and icebreaker	
80	Lecture by tutor with appropriate interaction with class to determine how much the students already know about the subject. Brief demonstration of noise measurement equipment. Play HSE NIHL demonstration – this will require speakers as normal built in speakers are insufficient.	PowerPoint, noise meter and noise dosimeter HSE Audio Demo Speaker system

Lesson plan: Section 14 – Vibration

Aims: To provide an overview of the physics of vibration and its health effects on the whole body and locally.

Objectives:

- To provide a basic knowledge of Human Anatomy (what goes where)
- To provide a basic understanding of Human Physiology (what things do)

Time (mins)	Activity	Resources
60	Explain what vibration is. Use hand tools to demonstrate. Holding electric toothbrush in contact with the side of a bowl of water or using plastic ruler on table. Explain health effects of exposure to vibration Ask students of examples	PowerPoint Tutor supplied vibrating tools; electric toothbrush, hand sander. Plastic ruler Bowl of water