

BHM356 WORKPLACE DESIGN & HEALTH

Academic Year 2013/14

Number of Aston Credits: 15

Number of ECTS Credits: 7.5

Staff Member Responsible for the Module:

Dr Joanne Lyubovnikova, Work and Organisational Psychology Group
Email: j.lyubovnikova@aston.ac.uk
Availability: see office hours on WASS

Dr Matthew Carter, Work and Organisational Psychology Group
Email: m.r.carter@aston.ac.uk
Availability: see office hours on WASS

Or contact the Work and Organisational Psychology Group Administrator
Jenny Thompson
Main Building South Wing, Room: 8002
Email: j.l.thompson@aston.ac.uk

Pre-requisites for the module:

None

Mode of Attendance:

On campus

Module Objectives and Learning Outcomes:

The overall aim of this module is to provide students with an understanding of the key principles of design of work environments, ergonomics and the importance of health and safety

- > To introduce the key principles of work design for developing effective work environments.
- > To raise the students' awareness of the role of psychology in helping to design products and environments

- > To introduce the principles of anthropometric, psychological and physiological in product and environmental design
- > To identify the role of human error in the breakdown of systems
- > To understand the principles of safety culture
- > To understand the legal framework of health and safety as applicable in the UK
- > To understand the importance of implementing a health and safety management system in organisations

At the end of the module students:

- > Will have a deeper understanding of the linkages between work design, ergonomics and health and safety
- > Will develop a deeper understanding of how the study of work psychology can aid in improving the performance and well-being of people at work
- > Will have developed skills in anthropometry, psychological and physiological measurement
- > Will have observed and reflected on the above in practical setting
- > Will be able to carry out risk assessment and develop a process of risk management
- > Will be able to apply health and safety legislation in the workplace to promote a culture of well-being
- > Will be able to develop preventive interventions to minimise health risks in the workplace
- > Will have developed a richer and more complex understanding of people and machines, enabling them to contribute more effectively in the workplace

Module Content:

- Week 1:** Key principles
- Week 2:** Anthropometry and ergonomics methods
- Week 3:** Human Machine interaction
- Week 4:** Workspace design and the professional's view
- Week 5:** Stress and health
- Week 6:** Legal requirements for health and safety
- Week 7:** Risk assessment and problem solving
- Week 8:** Error and accidents
- Week 9:** Course review and revision

Week 10: Exam

Corporate Connections:

The students benefit from connections with the business world via the lecture team's practical experience. For example Lectures 6 and 7 are delivered by Frank Watt, who is a qualified safety practitioner and who uses his experience in the Fire Service to illustrate and inform the course.

International Dimensions:

The programme focuses on many international variations in the workplace – for example in the variations in job enrichment and the range of expectations different cultures have of work.

Contribution of Research:

Research by members of the Work and Organisational Psychology Group is used throughout the module. This includes publications by Ann Davis, drawn on in week 1, and Steve Woods, drawn on in week 5. Leading empirical research in the field of Occupational Psychology is used to inform the content throughout the module.

Method of Teaching:

The module will include lectures, case studies, practical exercises, critical reading, research and discussion.

Method of Assessment and Feedback:

The assessment is divided into the following two components as:

Examination: 100%

Details of the examination will be confirmed during the lectures. A mock paper will be made available on Blackboard. Feedback is available on request either during office hours, via email or on Blackboard.

Learning Hours:

Pre-reading	27
Contact hours	27
Class preparation	27
Directed learning/additional reading	34
Private study/exam preparation	35
Total	150

Pre-reading:

These books and papers represent classic texts in the fields covered by the module. They do not need to be purchased for the module as all the material needed is contained on Blackboard, but students may like to consult them in preparation for the module.

Kroemer, K.H.E. & Kroemer, A.D. (2001) *Office ergonomics*. New York: Taylor and Francis.

Kroemer, K. H. E. (1997) *Fitting the task to the human, a textbook of occupational ergonomics*. London: Taylor and Francis.

Stranks, J. (2007) *Health and Safety at Work: An Essential Guide for Managers*. London: Kogan Page.

The following essential and recommended readings are subject to change. Students should not therefore purchase textbooks prior to commencing their course. If students wish to undertake background reading before starting the course, many of the chapters/readings are available in electronic form via on-line library catalogues and other resources.

Essential Reading

These books and papers represent classic texts in the fields covered by the module. They do not need to be purchased for the module as all the material needed is contained on Blackboard, but students may like to consult them in preparation for the exam or as future reference.

Health and Safety Executive (2013) Ergonomics and human factors at work. Available at www.hse.gov.uk/pubns/indg90.pdf

Health and Safety Executive (2013) Working with display screen equipment (DSE): A brief guide, Bootle: HSE. Available at <http://www.hse.gov.uk/pubns/indg36.pdf>

Kroemer, K.H.E. & Kroemer, A.D. (2001) *Office ergonomics*. New York: Taylor and Francis.

Kroemer, K. H. E. (1997) *Fitting the task to the human, a textbook of occupational ergonomics*. London: Taylor and Francis.

Reason, J. (1990) *Human Error*, Cambridge University Press.

Sanders, M.S. & McCormick, E.J. (1992) *Human Factors in Engineering a design*. New York: McGraw-Hill.



Aston Business School
Birmingham

Stranks, J. (2007) *Health and Safety at Work: An Essential Guide for Managers*. London: Kogan Page.

Stranks, J. (2000) *The Handbook of Health & Safety Practice*. London: Pearson Education

Wickens, C.D. (1992) *Engineering Psychology and Human Performance*. London: Addison Wesley

Recommended Journals:

Safety Science
Ergonomics
Risk Management
Work and Stress



For further information on any of the opportunities that Aston Business School offers, please contact:

Aston Business School Aston University Aston Triangle Birmingham B4 7ET +44 (0)121 204 3000 www.abs.aston.ac.uk