

Subject Description Form

Subject Code	SD1A01M
Subject Title	Everyday Ergonomics
Credit Value	3
Level	1
Pre-requisite/ Co- requisite/ Exclusion	None
Role and Purposes	The aims of everyday ergonomics are to develop the student's awareness and understanding of Ergonomics and Human Factors, Anthropometry, human limitation and capabilities, and general principles for Chinese population. The course explores the diversity of human body size and shape with a focus on the unique requirements of Chinese anthropometrics. In addition, the course introduces the basic knowledge of human visual information processing and control systems, and human cognition in order to educate the students about the ergonomics issues in everyday things. These ergonomics issues are closely related to human interaction and relationship in workplaces, health and safety considerations, and social communication. Understanding ergonomics needs will improve the productivity and the quality of life for Chinese, and eventually help to build a harmonious society. The goal of everyday ergonomics is to promote awareness of the need for China fit products and services in daily life for China's surging domestic market under the challenge of globalization.
Subject Learning Outcomes	Upon completion of the subject, students will be able to: (a) Understand the area of ergonomics discipline (b) Understand the ergonomics information and principles in everyday life (c) Understand human anthropometry, limitations and capabilities (d) Understand how ergonomics issues relate to human interactions and relationships (e) Understand how to use ergonomics knowledge to improve the productivity and quality of life (f) Aware of China-specific ergonomic issues



Syllabus	Day	Class Activity
	Day 1 4/7	Introduction
	Day 2 7/7	Lecture Ergonomics in design
	Day 3 8/7	Lecture Human body and anthropometry
	Day 4 10/7	Workshop Body measurement workshop
	Day 5 11/7	Lecture The human information processing
	Day 6 14/7	Workshop Signage design exercise
	Day 7 15/7	Lecture Ergonomics in public design
	Day 8 17/7	Project topic discussion
	Day 9 18/7	Field visit Information collection
	Day 10 21/7	Tutorial
	Day 11 22/7	Tutorial
	Day 12 24/7	Tutorial
	Day 13 25/7	Final group presentation and report
Teaching/Learning Methodology		ill consist of lectures, tutorials, case les, group discussions and presentations. t course materials.



Alignment with Intended Learning	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						
Outcomes			a.	b.	c.	d.	e.	f.	
	1. Assignments	40%	√	V	V	V	$\sqrt{}$	$\sqrt{}$	
	2. Final project presentation	20%	V	√	1	√	1	1	
	3. Final written report	40%	√	√	√	√	√	√	
	Total	100 %							
	 Assignments will including lecture: Group project mu understand ergond Group project will Group written rep 	notes, textbookst be China-romics issues in the evaluated	oks, an elated elated d in or	ergond to Ch al pres	nal artiomics sinese.	cles. study t on.	o ensu	re the	studen
Student Study	Class contact:								
Effort Expected	 Lectures from day 1 to day 12 						_		
Effort Expected	• Lectures from day	1 to day 12							27 Hrs.
Effort Expected	Lectures from dayAssignments in day	-	day 9)					6 Hrs.
Effort Expected	Assignments in daFinal presentation	y 4, day 6 and in day 13	l day ⁹)					6 Hrs
Effort Expected	Assignments in day	y 4, day 6 and in day 13	l day 9)					6 Hrs.
Effort Expected	Assignments in daFinal presentation	y 4, day 6 and in day 13	day 9)					6 Hrs.
Effort Expected	Assignments in dayFinal presentationOther student study effort	y 4, day 6 and in day 13	l day 9)					6 Hrs.
Effort Expected	 Assignments in day Final presentation Other student study efforms Reading 	y 4, day 6 and in day 13 ort:	l day 9)]	27 Hrs. 6 Hrs. 6 Hrs. 18 Hrs. 18 Hrs.



Recommended Magazines/Journals

- Ergonomics in Design
- Applied Ergonomics

References

- Ball R., Shu C., Xi P., Rioux M., Luximon Y., Molenbroek J., 2010. A comparison between Chinese and Caucasian head shapes, *Applied Ergonomics*, 41(6), 832-839.
- Baxter, M., 1995. Product design: Practical methods for the systematic development of new products, Chapman & Hall: London.
- Bond M.H., 2008. The psychology of the Chinese people. Chinese University Press: Hong Kong.
- Dul J. and Weerdmeester B., 2008. Ergonomics for beginners: a quick reference guide, CRC Press: Boca Raton.
- Fok T.F., Ng P.C., Hon K.L.E., 2007. Neonatal anthropometry for the Chinese, The Chinese University Press: Hong Kong.
- GB10000-88. Human dimensions of Chinese adults. Beijing: Standards Press of China, 1988.
- Luximon Y., Ball R. and Justice L., 2012. The 3D Chinese head and face modeling, *Computer-Aided Design*, 44 (1), 40-47.
- Norman, D.A., 2004. Emotional Design: Why We Love (or Hate) Everyday Things, Basic Books: New York.
- Norman, D.A., 2007. The Design of Future Things, Basic Books: New York.
- Norman, D.A., 2011. Living with complexity, MIT Press: Cambridge, Massachusetts.
- Pheasant, S. and Haslegrave, C.M., 1996. Bodyspace: Anthropometry, Ergonomics and the Design of Work, Third Edition, Taylor and Francis: London.
- Rubin, J., 2008. Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests, Wiley: New York, second edition.
- Sanders, M.S. and McCormick, E.J., 1993. Human Factors in Engineering and Design, Seventh Edition (International), McGraw-Hill Inc.: New York.
- Tilley, A.R., 2002. The Measure of Man & Woman: Human Factors in Design, John Wiley & Sons: New York.