Human Factors in Design ID-2320: Readings

WEEK 1

**Introduction and History**

David Meister: The History of Human Factors and Ergonomics (Chapter 4)

**Research Methods**

http://www.socialresearchmethods.net/kb/strucres.php

http://www.socialresearchmethods.net/kb/desintro.php

http://www.socialresearchmethods.net/kb/resques.php

http://www.socialresearchmethods.net/kb/destypes.php

http://www.socialresearchmethods.net/kb/hypothes.php

http://www.socialresearchmethods.net/kb/dedind.php

http://www.socialresearchmethods.net/kb/statdesc.php

http://www.socialresearchmethods.net/kb/statinf.php

http://www.socialresearchmethods.net/kb/measlevl.php

- Story: The Lead Casket

WEEK 2

**Design Evaluation Methods**

David Meister: Human Factors in System Design, Development and Testing (Chapter 3)

WEEK 3

**VISION**

Psychology as a Biological Science - Vision

- Section 3: Vision
WEEK 4

Auditory, Tactile and Vestibular Systems

Psychology as a Biological Science - Section 3

- Section 3: Hearing, Touch & Pain, Vestibular System

- Story: Mommy Murderess Escapes Prison

WEEK 5

Decision Making

Psychology as a Biological Science -

- Section 5: Judgement and Decision Making

Displays

The Learning Zone- Visual Displays

http://www.ergonomics4schools.com/lzone/displays.htm

- Story: Manhattan Black Out

Week 6

Control Systems

R.S. Bridger "Introduction to Ergonomics" on Control Systems (Chapter 13)

- Story: Dodging Bullets

Week 7

No readings - Exam 1

Week 8
Anthropometry and Body Measurement

NASA: Anthropometric and Biomechanics Data

http://msis.jsc.nasa.gov/sections/section03.htm

Week 9

Biomechanics of Work

Dan MacLeod: The Rules of Work: a practical engineering guide to ergonomics

OSHA Publications

https://www.osha.gov/pls/publications/publication.html

- Story: Death at Sea

Week 10

Stress and Workload

OSHA Technical Manual


Week 11

No readings - Spring Break

Week 12

Safety

Gavriel Salvendy: Handbook of Human Factors and Ergonomics (Chapters 25)

MIT OpenCourseware - System Safety Course (readings)

• **Story: Machine Designed to Heal Instead Kills**

**Week 13**

**Human Computer Interaction and Automation**

Encyclopedia of Human-Computer Interaction:

http://www.interaction-design.org/books/hci.html

• **Story: The Wrong Column**

**Reference Materials:**


