

SYSTEMS DESIGN ENGINEERING

Integrated Medical Information Management

SYDE 760 – Topic 4

FALL

Large amount of diverse data need to be gathered, managed and analysed for an integrated design of medical information systems. This course will explore these issues, which include form designs, data storage, statistics, data mining and software.

Main and Suggested Reading Material may include:

Books on Health Informatics

- Handbook of Medical Informatics by J.H. van Bommel and Mark A. Musen, Publisher AW Houten,
- The Netherlands : Bohn Stafleu Van Loghum ; Heidelberg, Germany : Springer Verlag, 2000, ©1997
- Medical Informatics: Computer Application in Health care and Bio medicine by Edward H. Shortliffe and Leslie E. Perreault , Second Edition Publisher New York : Springer, © 2001

Books on Data mining

- Data mining , Introductory and Advanced Topics by Margaret H. Dunham, Publisher Upper Saddle River, N.J. : Prentice Hall/Pearson Education, ©2003
- Data mining, Concepts and Techniques by Jiawei Han and Micheline Kamber, Publisher San Francisco : Morgan Kaufmann Publishers, 2001
- Data Mining by Pieter Adriaans and Dolf Zantinge, Publisher Harlow, England : Addison-Wesley, ©1996

Other reading material includes Research Papers from Journals which will be discussed during the class and group presentation.

INSTRUCTOR: K. Ponnambalam and J.F. Arocha
EMAIL: ponnu@uwaterloo.ca