

## Textbooks for Computer Science 2010

### 100 Level Papers

#### **COSC110**

- G Beekman, "Computer Confluence 7th Edition" (Prentice Hall).

#### **COSC121**

- Practical Programming: An Introduction to Computer Science Using Python, Campbell, Gries, Montojo and Wilson. Pragmatic Bookshelf, 2009 (required text).

#### **COSC122**

- Koffman, Elliot B. and Wolfgang, Paul A. "Objects, Abstraction, Data Structures and Design: Using Java 5.0" (John Wiley & Sons)

### 200 Level Papers

#### **COSC208**

- King, "C Programming - A Modern Approach" (Norton) Sheer, "LINUX: RUTE User's Tutorial and Exposition", (Prentice Hall) (Recommended – available electronically)
- Stroustrup, B: "The C++ Programming Language, Third Edition" (or the hardcover equivalent "Special Edition"). *This is the definitive textbook on C++ by the designer and original implementor of C++. It is a recommended text, particularly if you think you may be writing significant amounts of C++ in the future.*

#### **COSC221** (Recommended)

- A Tenenbaum, "Modern Operating Systems" Third Edition (Prentice-Hall)
- A Tenenbaum, "Structured Computer Organisation" Fifth Edition (Prentice-Hall)

#### **COSC222** (Recommended)

- E. Kinber, C-Smith "Theory of Computing" (Prentice –Hall)

#### **COSC224** (Text) - Recommended

- Sommerville, "Software Engineering" 8th Edition (Addison-Wesley) Fowler, "UML Distilled" 3rd Edition (Addison-Wesley)

#### **COSC225** (Recommended)

- A Dix, J Finlay, G Abowd, R Beale, "Human-Computer Interaction" (Prentice-Hall).
- J Nielson, "Usability Engineering" (Morgan Kauffman).
- FS Hill, " Computer Graphics Using OpenGL" (Prentice Hall)
- M Woo, T David, P Womack, "Open GL Programming Guide" (Addison-Wesley)

#### **COSC226**

- R Elmasri, S Navathe, "Fundamentals of Database Systems" 5th Edition. (Addison-Wesley).
- Course Reader available from Library Copy Centre (Required)

#### **COSC227** (Recommended)

- Applebaum, "Probability & Information: an Integrated Approach" (Cambridge University).
- Molloy, "Fundamentals of Performance Modelling" (MacMillan).
- Law & Kelton, "Simulation Modelling & Analysis (McGraw-Hill).
- Roman, "Introduction to Coding and Information Theory" (Springer-Verlag).
- Trivedi; "Probability and Statistics with Reliability, Queueing and Computer Science Applications" (Wiley)

#### **COSC229** (Recommended)

- M.T Goodrich, R.Tamma, "Algorithm Design" (Wiley)

#### **COSC230**

- Lecture notes will be provided

#### **COSC231** (Recommended)

- William Stallings “Data and Computer Communications” 8th Edition (Prentice Hall)

### **300 Level Papers**

#### **COSC324 & COSC325 (Recommended)**

- Sommerville, “Software Engineering” 8th edition (Addison-Wesley).
- Fowler, “UML Distilled” 3rd Edition (Addison-Wesley).
- Freeman & Bates, “Head First Design Patterns”
- Goldfarb & Prescod, “Charles F Goldfarb’s XML Handbook, 5th edition
- Gamma, Helm, Johnson & Vlissides, “Design Patterns: Elements of re-usable Object-Oriented Software” (Addison-Wesley)
- Bradley, “The XML Companion” (Addison-Wesley)

#### **COSC326 (Text)**

- R Elmasri, & S Navathe “ Fundamentals of Database Systems” 5th Edition(Addison-Wesley)

#### **COSC327 (Recommended)**

- Ng, Chee Hock, “Queueing Modelling Fundamentals” (Wiley, 1996).
- Law & Kelton, “Simulation Modelling and Analysis” (McGraw-Hill, 1991).
- Page & Kreutzer, “Java Simulation Handbook”
- Trivedi; “Probability and Statistics with Reliability, Queueing and Computer Science applications” (Wiley)

#### **COSC329 (Recommended)**

- E Horowitz, S Sahni, and S Rajasekaran, “ Computer Algorithms” (MacMillan).
- Rob Callan, “Artificial Intelligence”, (Palgrave)

#### **COSC331**

- Course Reader (Data Communication and Networks) available from Library Copy Centre (Required)
- William Stallings, “Data and Computer Communications”, 7<sup>th</sup> or 8<sup>th</sup> Edition (Pearson/Prentice Hall) (Recommended)

#### **COSC332**

- Course Reader (Data Communication and Networks) available from Library Copy Centre (Required)
- Harrington, J. “Network Security” (Elsevier Publishing)
- Stallings, W. “Network Security Essentials” (Prentice Hall)

#### **COSC361 (Recommended)**

- Brown SI, Vranesic ZI, “Fundamentals of Digital Logic with VHDL Design” (McGraw Hill)
- TD Morton, Embedded Controllers” (Prentice Hall, 2001)

#### **COSC363 (Recommended)**

- Edward Angel, “Interactive Computer Graphics” 5<sup>th</sup> Edition (Addison-Wesley)
- Mason Woo et. al., “OpenGL Programming Guide” 3rd Edition (Addison-Wesley)

#### **COSC365 (Recommended)**

- Beginning Visual C# 2008, Watson, Nagel, Pedersen, Reid, Skinner, White, Wiley, 2008. (recommended Text)
- George Coulouris, Jean Dollimore, and Tim Kindberg. “Distributed Systems: Concepts and Design”. Addison-Wesley, 2<sup>nd</sup> edition, 1994. Later editions exist.
- Martin Fowler. “Patterns of Enterprise Application Architecture”. Addison-Wesley, 2003
- James McGovern, Oliver Sims, Ashish Jain, and Mark Little. “Enterprise Service Oriented Architectures: Concepts, Challenges, Recommendations”. Springer, 2006.