**Week to Semester Schedule**

**(to be followed)**

**Object Oriented System Analysis and Design (OOSA&D) [CST 2234]**

**Winter session 2019**

**Prepared by: Professor Asim J. Butt**

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| **Date** | **Weekly Theme and Learning Outcomes** | **Resources** |
| **Week One**  **7 Jan- 11 Jan** | * Introduction to OOSA&D * Review of course outline and weekly schedule * Class expectations * Formal requirements to pass this course * How the course will be taught? * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | Overview of the course, distribution and explanation of material related to course, introduction to the SA&D, expectation from students and formal requirements to pass this course. |
| **Week Two**  **14 Jan -18 Jan** | * Skills required to become a System Analyst * Expertise required regarding software's front-end, back-end and the databases * Understanding the business and people * Knowledge about different systems found in professional organizations * System Development Life Cycle (SDLC), Rational Unified Process (RUP) * Models, Methodologies, Tools and Techniques required in OOSA&D * Overview of Object Oriented Programming * Supporting Tools * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter one and two:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Three**  **21 Jan- 25 Jan** | * Unified Process (UP) and Phases * UP and Inception phase * Project Management under UP * Development of GANTT Chart * **hybrid assignment (3%)** * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter three:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Four**  **28 Jan- 1 Feb** | * Software Requirements and requirements engineering * System requirements and modeling * Techniques for requirements gathering * Validating the system and software requirements * Development of PERT and Work Breakdown Structure (WBS) Chart * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter four:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Five**  **4 Feb- 8 Feb** | * Implementing Events, Use Cases and Use Case diagrams * Developing and Implementing Class Diagrams * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter five:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Six**  **11 Feb - 15 Feb** | * Understanding and Implementing the System Sequence, Sequence and State Chart diagrams * **Hybrid assignment (3%)** * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** * **Project Part 1 Submission (15%)** | **Chapter six:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Seven**  **18 Feb - 22 Feb** | * Term 1 Exam (worth 10%)   **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** |  |
| **Week Eight**  **25 Feb- 1 Mar** | * Implementing the Class and Package Diagram * Implementing the Interaction Diagram * **Hybrid assignment (3%)** * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter seven:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Nine**  **4 Mar- 8 Mar** | * Modeling and Re-Modeling system's behavior * Design Principles and design Patterns * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter eight:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Ten**  **11 Mar- 15 Mar** | * Term 2 Exam (worth 10%) * Designing Database and suitability for Database Management System (DBMS) * Customization of Object Oriented Databases, Relational Databases, and Distributed Databases * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter 9:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Eleven**  **18 Mar- 22 Mar** | * Designing, Finalizing and Customizing the User Interface Layer, Recommending the Graphical User Interface(GUI), * **Hybrid assignment #4 (3%)** * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter 10:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Twelve**  **25 Mar- 29 Mar** | * Designing the System Interfaces, Controls and Security * Deciding the System's Inputs, Outputs, Security and Integrity Controls * Development of Deployment Strategies * Configuration and Change Management * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | **Chapter 11:**  Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Thirteen**  **1 April- 5 April** | * Course wrap-up * Final exam review * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** | Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3 |
| **Week Fourteen**  **8 April- 12 April** | * **Course Flashback** * **Hybrid assignment #5 (3%)** * **Lab shall contain lab activity which students are bound to finish within the lab session on weekly basis. (0.35%)** * **Project Part 2 Submission (15%)** |  |
| **Week Fifteen**  **15 April- 19 April** | * **Final examination (worth 30%)** * Marking * Results' submission | Semester Ending |

**NOTE:** Term 1 Exam is decided to be taken in week 7 and Term 2 Exam in week 10 if other things do not change or if there is no conflict in the availability of resources in the department. Please contact the Professorbefore you book any ticket.

**Division of Marks:**

Hybrid Assignments (3-5) 15%

Lab work (14 weeks) 5%

Project (2 Parts) 15%+15%=30%

Term 1 Exam 10%

Term 2 Exam 10%

Final-Term Exam 30%

**Total: 100%**

**Textbook**

Object-Oriented Analysis & Design with the Unified Process, Satzinger, Jackson and Burd, Course Technology, ISBN 0-619-21643-3.

**Tools Required in the course:**

Microsoft Project (MS Project)

Microsoft Visio (MS Visio)

