# San José State University Computer Engineering CMPE 272, Enterprise Software Platforms, Session 2, Fall 2017

## Course and Contact Information

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| Instructor: | Richard Sinn |
| Office Location: | ENG 337 |
| Telephone: | (408) 924-4150 |
| Email: | richardsinn@yahoo.com |
| Office Hours: | Sat, after class or by appointment |
| Class Days/Time: | Sat, 9:15am |
| Classroom: | ENG 337 |
| Prerequisites: | Classified graduate standing or instructor consent. Computer Engineering and Software Engineering majors only. |

## Course Description

## *Enterprise software, system and virtualized platforms. Covers OSs, NOS, security, databases (OLTP, Big Data, Analytics), transactions, groupware, components, web services, web, systems management and app development. Covers standards and emerging technologies. Prerequisite: Classified graduate standing or instructor consent. Computer Engineering and Software Engineering majors only.*

### Program Outcomes and Course Learning Objectives

MS in Software Engineering Program Outcomes (PO)

|  |  |
| --- | --- |
|  | Description |
| PO 1 | Be able to demonstrate an understanding of advanced knowledge of the practice of software engineering, from vision to analysis, design, validation and deployment. |
| PO 2 | Be able to tackle complex engineering problems and tasks, using contemporary engineering principles, methodologies and tools. |
| PO 3 | Be able to demonstrate leadership and the ability to participate in teamwork in an environment with different disciplines of engineering, science and business. |
| PO 4 | Be aware of ethical, economic and environmental implications of their work, as appropriate. |
| PO 5 | Be able to advance successfully in the engineering profession, and sustain a process of life-long learning in engineer or other professional areas. |
| PO 6 | Be able to communicate effectively, in both oral and written forms. |

Course Learning Objectives (CLO)

|  |  |
| --- | --- |
|  | Description |
| CLO 1 | Ability to identify and evaluate technologies and place them within a software platform. |
| CLO 2 | Ability to understand where a technology fits within its maturity lifecycle. |
| CLO 3 | Ability to understand the standardization process for enterprise class software technologies. |
| CLO 4 | Ability to compose a software platform and system architecture solution using available technologies given a business problem. |
| CLO 5 | Ability to analyze software technologies, standards, and architectures then communicate the outcome of the analysis. |

Course Learning Objectives Support Program Outcomes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 |
| CLO 1 | X |  |  |  |  |  |
| CLO 2 |  | X |  |  |  |  |
| CLO 3 | X |  |  |  |  |  |
| CLO 4 |  | X |  |  |  |  |
| CLO 5 |  |  |  |  |  | X |

## Required Texts/Readings

### *Reading is distributed in classes.*

## Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

## Grading Information

Apart from big term project(s) and presentation, there are homework assignments, a mid-term exam and a final exam. The weightings for grading are: Term Project 20%, Labs/Homework 35%, Midterm 15%, Final Exam 20%, and Team Presentation 10%.

No Late Assignment Submission. Put everything in an envelop when submit any material.

## Classroom Protocol

Each student is required to engage in classroom activities, participate in project reviews and presentations, submit assignments and reports on time, *and*take exams and tests on time.

## University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at http://www.sjsu.edu/gup/syllabusinfo/”

# CMPE272 / Enterprise Software Platforms, Fall 2017, Course Schedule

*Schedule is subjected to change with fair notice in class.*

## Course Schedule

| Week | Topics, Readings, Assignments, Deadlines |
| --- | --- |
| 1 | Enterprise Architecture |
| 2 | Wireless and Mobile Networks |
| 3 | HTTP |
| 4 | TCP / Networking |
| 5 | HTML 5 Programming |
| 6 | Security Overview |
| 7 | PKI |
| 8 | Firewall and IDS |
| 9 | Database Overview |
| 10 | Database / SQL |
| 11 | Big Data |
| 12 | Mobile Computing |
| 13 | Cloud Computing |
| 14 | RFID / IoT |
| 15 | Project Presentation |
| 16 | Final Exam |