

**San Pablo Catholic University (UCSP)**  
**Undergraduate Program in**  
**Computer Science**  
**SILABO**



**CS393. Information Systems (Elective)**

**1. General information**

|                       |   |   |
|-----------------------|---|---|
| 1.1 School            | : | Ciencia de la Computación                             |
| 1.2 Course            | : | CS393. Information Systems                            |
| 1.3 Semester          | : | 10 <sup>mo</sup> Semestre.                            |
| 1.4 Prerequisites     | : | CS292. Software Engineering II. (6 <sup>th</sup> Sem) |
| 1.5 Type of course    | : | Elective  |
| 1.6 Learning modality | : | Virtual   |
| 1.7 Horas             | : | 2 HT; 2 HP; 2 HL;                                     |
| 1.8 Credits           | : | 4   |

**2. Professors**

**3. Course foundation**

Analyze techniques for the correct implementation of scalable, robust, reliable and efficient information systems in organizations.

**4. Summary**

- 1. Introduction
- 2. Strategy
- 3. Implementation

**5. Generales Goals**

- Implement correctly (scalable, robust, reliable and efficient) Information Systems in organizations.

**6. Contribution to Outcomes**

This discipline contributes to the achievement of the following outcomes:

- c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. (**Usage**)
- i) An ability to use the techniques, skills, and modern computing tools necessary for computing practice. (**Usage**)
- k) Apply the principles of development and design in the construction of software systems of variable complexity. (**Assessment**)

**7. Content**

**UNIT 1: Introduction (15)**

**Competences:** c,i

| Content   | Generales Goals  |
|---|--|
| <ul style="list-style-type: none"> <li>• Introduction to information management.</li> <li>• Software for information management.</li> <li>• Technology for information management.</li> </ul> | <ul style="list-style-type: none"> <li>• Correctly apply technology for information management [Assessment]</li> </ul> |

**Readings:** Sommerville (2017), Pressman and Maxim (2015), K. C. Laudon and J. P. Laudon (2017)

|   |   |
|---|---|
| <b>UNIT 2: Strategy (15)</b>  |   |
| <b>Competences:</b> i,k   |   |
| <b>Content</b>  | <b>Generales Goals</b>  |
| <ul style="list-style-type: none"> <li>• Strategy for information management.</li> <li>• Strategy for knowledge management</li> <li>• Strategy for information system.</li> </ul> | <ul style="list-style-type: none"> <li>• Apply and evaluate correctly management strategies [Assessment]</li> </ul> |

**Readings:** Sommerville (2017), Pressman and Maxim (2015)

|  |   |
|--|---|
| <b>UNIT 3: Implementation (15)</b>   |   |
| <b>Competences:</b> c,i,k  |   |
| <b>Content</b>   | <b>Generales Goals</b>  |
| <ul style="list-style-type: none"> <li>• Management Information Systems Development.</li> <li>• Change management</li> <li>• Information Architecture</li> </ul> | <ul style="list-style-type: none"> <li>• Implement and correctly evaluate implementation strategies [Assessment]</li> </ul> |

**Readings:** Sommerville (2017), Pressman and Maxim (2015)

## 8. Methodology

El profesor del curso presentará clases teóricas de los temas señalados en el programa propiciando la intervención de los alumnos.

El profesor del curso presentará demostraciones para fundamentar clases teóricas.

El profesor y los alumnos realizarán prácticas

Los alumnos deberán asistir a clase habiendo leído lo que el profesor va a presentar. De esta manera se facilitará la comprensión y los estudiantes estarán en mejores condiciones de hacer consultas en clase.

## 9. Assessment

**Continuous Assessment 1 : 20 %**

**Partial Exam : 30 %**

**Continuous Assessment 2 : 20 %**

**Final exam : 30 %**

## References

- Laudon, Kenneth C. and Jane P. Laudon (Mar. 2017). *Management Information Systems: Managing the Digital Firm.* 15th. Pearson.  
 Pressman, Roger S. and Bruce Maxim (Jan. 2015). *Software Engineering: A Practitioner's Approach.* 8th. McGraw-Hill.  
 Sommerville, Ian (Mar. 2017). *Software Engineering.* 10th. Pearson.