Peruvian Computing Society (SPC)
School of Computer Science
Sillabus 2021-I

1. COURSE

CS393. Information systems (Mandatory)

2. GENERAL INFORMATION

2.1 Credits	:	4
2.2 Theory Hours	:	2 (Weekly)
2.3 Practice Hours	:	2 (Weekly)
2.4 Duration of the period	:	16 weeks
2.5 Type of course	:	Mandatory
2.6 Modality	:	Face to face
2.7 Prerrequisites	:	CS291. Software Engineering I. (5^{th} Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

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

5. GOALS

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

6. COMPETENCES

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. SPECIFIC COMPETENCES

c2) Design and develop information systems that implement business rules.

i1) Develop components using modern computer techniques that implement functionality and are useful for various information systems.

k1) Perform adequately as part of an information system implementation project.

8. TOPICS

Unit 1: Introduction (15)	
Competences Expected: c,i	
Topics	**Learning Outcomes**
• Introduction to information management. • Software for information management. • Technology for information management.	• Correctly apply technology for information management [Assessment]
Readings : [Som17], [PM15], [LL17]	

Unit 2: Strategy (15)	
Competences Expected: i,k	
Topics	**Learning Outcomes**
• Strategy for information management. • Strategy for knowledge management • Strategy for information system.	• Apply and evaluate correctly management strategies [Assessment]
Readings : [Som17], [PM15]	

Unit 3: Implementation (15)	
Competences Expected: c,i,k	
Topics	**Learning Outcomes**
• Management Information Systems Development. • Change management • Information Architecture	• Implement and correctly evaluate implementation strategies [Assessment]
Readings : [Som17], [PM15]	

9. WORKPLAN

9.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

9.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

9.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

10. EVALUATION SYSTEM

********* EVALUATION MISSING ********

11. BASIC BIBLIOGRAPHY

[LL17] Kenneth C. Laudon and Jane P. Laudon. *Management Information Systems: Managing the Digital Firm*. 15th. Pearson, Mar. 2017.

[PM15] Roger S. Pressman and Bruce Maxim. *Software Engineering: A Practitioner's Approach*. 8th. McGraw-Hill, Jan. 2015.

[Som17] Ian Sommerville. *Software Engineering*. 10th. Pearson, Mar. 2017.