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

# CS404. Capstone Project III (Mandatory)



| 2025-11                |   |  |
|------------------------|---|--|
| 1. General information |   |  |
| 1.1 School             | : | Ciencia de la Computación                          |
| 1.2 Course             | : | CS404. Capstone Project III                        |
| 1.3 Semester           | : | $10^{mo}$ Semestre.                                |
| 1.4 Prerrequisites     | : | CS403. Capstone Project II. $(9^{th} \text{ Sem})$ |
| 1.5 Type of course     | : | Mandatory  |
| 1.6 Learning modality  | : | Face to face                                       |
| 1.7 Horas              | : | 2 HT; 2 HP;  |
| 1.8 Credits            | : | 3  |
| 1.9 Plan               | : | Plan Curricular 2016                               |

### 2. Professors

#### Lecturer

- Alex Jesús Cuadros Vargas <acuadros@ucsp.edu.pe>
  - ■PosDocIn∎ Ciencia de la Computación, ICMC-USP, Brasil, 2009.
  - PhD in Ciencia de la Computación, ICMC-USP, Brasil, 2007.
  - MSc in Ciencia de la Computación, ICMC-USP, Brasil, 2001.
- Jose Eduardo Ochoa Luna <jeochoa@ucsp.edu.pe>
  - PhD in Ciencia de la Computación, Universidade de Sao Paulo, Brasil, 2011.
  - MSc in Ciencia de la Computación, Universidade Federal de Mato Grosso do Sul UFMS, Brasil, 2004.
- Juan Carlos Gutiérrez Cáceres <jcgutierrezc@ucsp.edu.pe>
  - PhD in Ciencia de la Computación, Universidad Nacional de San Agustín, Perú, 2013.
  - MSc in Ciencia de la Computación, ICMC-USP, Brasil, 2003.
- Edward Jorge Yuri Cayllahua Cahuina <ejcayllahua@ucsp.edu.pe>
  - MSc in Computer Science, Universidade Federal de Ouro Preto, Brazil, 2019.

#### 3. Course foundation

This course aims to enable students to complete properly their draft of thesis.

#### 4. Summary

1. Escritura del Borrador del trabajo de final de carrera (tesis)

### 5. Generales Goals

- That the student completes this course with his thesis elaborated in sufficient quality as for an immediate support.
- That the student formally present the draft dissertation before the authorities of the faculty
- The deliverables of this course are:

**Parcial:** Advancement of the thesis project including in the document: introduction, theoretical framework, state of the art, proposal, analysis and / or experiments and solid bibliography.

Final: Full thesis document and ready to support in a period of no more than fifteen days.

#### 6. Contribution to Outcomes

This discipline contributes to the achievement of the following outcomes:

- 1) Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. (Assessment)
- 2) Design, implement and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. (Assessment)
- 3) Communicate effectively in a variety of professional contexts. (Assessment)
- 4) Recognize professional responsabilities and make informed judgments in computing practice based on legal and ethical principles. (Assessment)
- 5) Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. (Assessment)
- 6) Apply computer science theory and software development fundamentals to produce computing-based solutions. (Assessment)
- 7) Develop computational technology for the well-being of all, contributing with human formation, scientific, technological and professional skills to solve social problems of our community. (Assessment)

#### 7. Content

| UNIT 1: Escritura del Borrador del trabajo de final de carrera (tesis) (60)<br>Competences: |  |  |  |  |
|---|--|--|--|--|
|   |  |  |  |  |
| • Writing and correction of the work of end of career                                       | <ul> <li>Experimental part completed (if appropriate to the project) [Assessment]</li> <li>Verify that the document complies with the thesis format of the course [Assessment]</li> <li>Delivery of the completed thesis draft and considered ready for public support (approval requirement)[Assessment]</li> </ul> |  |  |  |
| <b>Readings:</b> IEEE-Computer Society (2008), Association for                              | Computing Machinery (2008), CiteSeer.IST (2008)  |  |  |  |

- 8. Methodology
- 1. El profesor del curso presentará clases teóricas de los temas señalados en el programa propiciando la intervención de los alumnos.
- 2. El profesor del curso presentará demostraciones para fundamentar clases teóricas.
- 3. El profesor y los alumnos realizarán prácticas
- 4. 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 Theory Sessions:

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

#### **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.

#### **Evaluation System:**

The final grade is obtained through of:

| CONTINUOUS ASSESMENT             | EVALUATIONS          |
|----------------------------------|----------------------|
| Continuous assessment 1 : 10 %   | Midterm Exam : 10 %  |
| Continuous assessment $2$ : 10 % | Final Exam : 70 $\%$ |
| 20%                              | 80%                  |

Where:

Continuous Assessment: It includes group work, active participation in class, exercise test.

- Continuos assessment 1 (weeks 1 9)
- Continuos assessment 2 (weeks 10 17)

To pass the course you must obtain 11.5 or more in the final grade .

## References

Association for Computing Machinery (2008). Digital Libray. http://portal.acm.org/dl.cfm. Association for Computing Machinery.

CiteSeer.IST (2008). Scientific Literature Digital Libray. http://citeseer.ist.psu.edu. College of Information Sciences and Technology, Penn State University.

IEEE-Computer Society (2008). Digital Libray. http://www.computer.org/publications/dlib. IEEE-Computer Society.