



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

**1. COURSE**

CS404. Final Project III (Mandatory)

**2. GENERAL INFORMATION**

<b>2.1 Credits</b>	: 6
<b>2.2 Theory Hours</b>	: 2 (Weekly)
<b>2.3 Practice Hours</b>	: -
<b>2.4 Duration of the period</b>	: 16 weeks
<b>2.5 Type of course</b>	: Mandatory
<b>2.6 Modality</b>	: Face to face
<b>2.7 Prerequisites</b>	: CS403. Final Project II. (9 <sup>th</sup> Sem)

**3. PROFESSORS**

Meetings after coordination with the professor

**4. INTRODUCTION TO THE COURSE**

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

**5. 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. COMPETENCES**

- a) An ability to apply knowledge of mathematics, science. (**Usage**)
- b) An ability to design and conduct experiments, as well as to analyze and interpret data. (**Usage**)
- 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**)
- d) An ability to function on multidisciplinary teams. (**Usage**)
- e) Understand correctly the professional, ethical, legal, security and social implications of the profession. (**Usage**)
- f) An ability to communicate effectively. (**Usage**)
- h) A recognition of the need for, and an ability to engage in life-long learning. (**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. (**Usage**)
- l) Develop principles research in the area of computing with levels of international competitiveness. (**Usage**)
- p) Improve the conditions of society by putting technology at the service of the human being. (**Assessment**)

## 7. SPECIFIC COMPETENCES

- a29) Demonstrate math and computer skills in an integrated final project
- b18) Define requirements in an integrated fine project.
- c11) Design and implement integrated software.
- d1) Collaborative software development using code repositories and version management (e.g., Git, Bitbucket, SVN)
- d5) Develop software that is ready to be integrated with other components or pieces of software
- e1) Demonstrate a proper understanding of the ethical implications of the software you build.
- e2) Demonstrate a proper understanding of the safety implications of the software you build.
- e9) Promote an ethic that founds the professional skills that are formed during the career.
- f1) Clearly transmit technical proposals to audiences in other areas.
- f2) Transmit technical proposals in the area of computing in English.
- f3) Transmit technical proposals in English to audiences in other areas.
- g1) Develop solutions that solve an existing problem in our society.
- g2) Design efficient software solutions based on a correct understanding of the architecture of a computer or a group of them.
- h1) Develop research projects with levels of complexity appropriate for undergraduate study.
- h2) Demonstrate the ability to learn to learn autonomously.
- i2) Use programming languages and environments that allow the implementation and debugging of solutions.
- k10) Demonstrate mastery of the principles of quality software development in an integrated project
- l1) Demonstrate that you have developed research according to an undergraduate level.
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## 8. TOPICS

Unit 1: Escritura del Borrador del trabajo de final de carrera (tesis) (60)	
Competences Expected: h,g,e,f,i,l	
Topics	Learning Outcomes
<ul style="list-style-type: none"> <li>• Writing and correction of the work of end of career</li> </ul>	<ul style="list-style-type: none"> <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>
Readings : [IEE08], [Ass08], [Cit08]	

## 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

- [Ass08] Association for Computing Machinery. *Digital Libray*. <http://portal.acm.org/dl.cfm>. Association for Computing Machinery, 2008.
- [Cit08] CiteSeer.IST. *Scientific Literature Digital Libray*. <http://citeseer.ist.psu.edu>. College of Information Sciences and Technology, Penn State University, 2008.
- [IEE08] IEEE-Computer Society. *Digital Libray*. <http://www.computer.org/publications/dlib>. IEEE-Computer Society, 2008.