

## Virtual Equipments

Academic Year: ( 2022 / 2023 )

Review date: 20-05-2022

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: MEDINA DOMINGUEZ, FUENSANTA

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Principles of Software Development

## OBJECTIVES

Competencies

- 1) General concepts about virtual teams.
- 2) Knowledge of virtual teams management
- 3) Knowledge about the mechanisms to create virtual teams
- 4) Knowledge about cultural management models
- 5) Knowledge about the models of communication and collaboration in virtual teams
- 6) Knowledge about expression techniques in virtual communications
- 7) Knowledge of how to manage projects in virtual teams
- 8) Knowledge of collaborative work tools
- 9) Knowledge of social software tools

The students will learn:

- 1) Manage projects in virtual teams
- 2) Use collaborative working tools
- 3) Use social software tools
- 4) Analyze and design virtual machines
- 5) Plan communication and collaboration mechanisms in virtual teams
- 6) Managing cultural diversity in virtual teams

## DESCRIPTION OF CONTENTS: PROGRAMME

This subject is focused on team management and global software development.

The contents are:

- 1) Effect of virtual team management in the software engineer profile.
- 2) Concepts about team management, both virtual and face to face.
- 3) Mechanisms for creating virtual teams.
- 4) Software collaborative work tools.
- 5) Technical writing and speaking for the use of remote communication web tools.
- 6) Project management for virtual teams.
- 7) Social software for working in virtual teams

## LEARNING ACTIVITIES AND METHODOLOGY

1. Lectures: participatory approach to get the specific competencies of the subject.
2. Practices: A practical example about a real problem working in virtual teams will be carried out.

## ASSESSMENT SYSTEM

It will be 100% continuous assessment where students will have evaluable practices.

<b>% end-of-term-examination:</b>	0
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	100

## BASIC BIBLIOGRAPHY

- Carmel, E. Global Software Teams: Collaborating Across Borders and Time Zones, Prentice Hall, 1999
- Ebert, C. Global Software and IT: A Guide to Distributed Development, Projects, and Outsourcing, Wiley, 2011
- Eckstein, J. Agile Software Development with Distributed Teams: Staying Agile in a Global World , Dorset House Publishing, 2013
- Iqbal A., Gencel C., Abbas S. Communication Risks and Best practices in Global Software Development, LAP Lambert Academic Publishing , 2012
- Pauleen, D Virtual teams: projects, protocols and processes, IGI Global, 2004
- Piattini M., Vizcaíno A., Garcia F. Desarrollo Global de Software, RA-MA S.A. Editorial y Publicaciones, 2014

## ADDITIONAL BIBLIOGRAPHY

- Gibson, C.B.; Cohen, S.G Virtual teams that work: creating conditions for virtual team effectiveness, John Wiley and Sons, 2003
- Lipnack,J; Stamps, J. Virtual teams: people working across boundaries with technology, Wiley, 2000
- Siebdrat, F. Virtual teams: understanding their dynamics and leveraging their performance ; an empirical study of software development teams, F. Siebdrat, 2009