

[GBN102] INFORMATION SYSTEMS IN HEALTHCARE

GENERAL INFORMATION

Studies	DEGREE IN BIOMEDICAL ENGINEERING		Subject	Healthcare Environments
Semester	2	Course	3	Mention / Field of specialisation
Character	COMPULSORY		Language	ENGLISH
Plan	2017	Modality	Adapted Face-to-face	Total hours
Credits	4,5	Hours/week	3.96	71.25 class hours + 41.25 non-class hours = 112.5 total hours

PROFESSORS

CUENCA ARIZA, JAVIER

TERMENON CONDE, MAITE

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

SKILLS

VERIFICA SKILLS

SPECIFIC

GBCE29 - To understand and apply information system tools to meet the information needs of hospital environments.

GENERAL

GBCG10 - To be familiar with and apply the relevant laws and regulations concerning the professional activity of Biomedical Engineering.

GBCG9 - Possessing organisation and planning skills within the environment of the company and other institutions and organisations.

CROSS

GBCTR2 - To be able to do their job in cooperative, participatory environments, with awareness of social responsibility.

BASIC

G_CB2 - To be able to apply knowledge to occupational or professional tasks; have the necessary skills to pose and defend arguments, and to solve problems within their field of study

LEARNING RESULTS

RG301 Assumes responsibilities in the work team, organizing and planning the tasks to be developed, facing the contingencies and encouraging the participation of its members.

LEARNING ACTIVITIES

	CH	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	4 h.	1 h.	5 h.

EVALUATION SYSTEM

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

W

100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 4 h.

NCH - Non-class hours: 1 h.

TH - Total hours: 5 h.

RG302 Analyze the intervening variables in the problem and propose actions for a stable situation.

LEARNING ACTIVITIES

	CH	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	4 h.	1 h.	5 h.

EVALUATION SYSTEM

Reports on the completion of exercises, case studies,

W

100%

MAKE-UP MECHANISMS

(No mechanisms)

computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

CH - Class hours: 4 h.
NCH - Non-class hours: 1 h.
TH - Total hours: 5 h.

RG304 Define the problem, develop the solution and present the conclusions in a efficient manner, arguing and justifying each one of them in writing.

LEARNING ACTIVITIES

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	3 h.	1 h.	4 h.

EVALUATION SYSTEM

	<i>W</i>
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 3 h.
NCH - Non-class hours: 1 h.
TH - Total hours: 4 h.

RG305 Define the problem, develop the solution and present the conclusions in a efficient manner, arguing and justifying each one of them in spoken form.

LEARNING ACTIVITIES

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	3 h.	1 h.	4 h.

EVALUATION SYSTEM

	<i>W</i>
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 3 h.
NCH - Non-class hours: 1 h.
TH - Total hours: 4 h.

RGB320 [!] *Conoce y comprende la informatización del sistema hospitalario*

LEARNING ACTIVITIES

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	11 h.	6 h.	17 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	8 h.	8 h.	16 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	16 h.	9,25 h.	25,25 h.

EVALUATION SYSTEM

	<i>W</i>
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory	30%

MAKE-UP MECHANISMS

Individual written and oral tests to assess technical skills of the subject

exercises, term projects, challenges and problems	
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	30%
Individual written and/or oral tests or individual coding/programming tests	40%

CH - Class hours: 35 h.

NCH - Non-class hours: 23,25 h.

TH - Total hours: 58,25 h.

RGB321 [!] *Conoce y aplica herramientas de estructuración e interoperabilidad de datos para su gestión*

LEARNING ACTIVITIES

	CH	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	8 h.	4 h.	12 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	6 h.	4 h.	10 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	8,25 h.	6 h.	14,25 h.

Comments: The methodology of the course is as follows: 1. Lecture classes (4h per week). 2. Practical exercises to practice both in and out of class. 3. Use of Moodle for content management and communications.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	30%
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	30%
Individual written and/or oral tests or individual coding/programming tests	40%

Comments: The evaluation system consists of: 1. One checkpoint (40% of the grade). 2. A group practice to be carried out during the semester (20% of the grade). 3. Realization of the POPBL for the semester (40% of the grade)

MAKE-UP MECHANISMS

Individual written and oral tests to assess technical skills of the subject

Comments: There will be a checkpoint to recover the exam.

CH - Class hours: 22,25 h.

NCH - Non-class hours: 14 h.

TH - Total hours: 36,25 h.

CONTENTS

1. Hospital Information Systems - Current map of Hospital IS a Hospital and the entire orbit of institutions, agents, suppliers, ... -Ish Projects -Processes for selecting SIH solutions

2. Interoperability of the SIH - Data representation languages (XML, DTD, XML schema, XSLT).

- Data visualization languages (HTML, CSS).

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Subject notes

Bibliography

Health care information systems ―a practical approach for

Moodle Platform
Class presentations

health care management―4th ed Karen, A.. ISBN:
978-1-119-33718-8