

**1. General information****Course:** EXERCISE PHYSIOLOGY II**Type:** CORE COURSE**Degree:** 314 - DEGREE IN SCIENCES OF THE PHYSICAL ACTIVITY AND OF THE SPORT**Center:** 8 - FACULTY OF SPORT SCIENCES**Year:** 3**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 39316**ECTS credits:** 6**Academic year:** 2021-22**Group(s):** 40**Duration:** First semester**Second language:** English**English Friendly:** Y**Bilingual:** Y**Lecturer:** RICARDO MORA RODRIGUEZ - Group(s): 40

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2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Not established

4. Degree competences achieved in this course**Course competences**

Code	Description
A03	Understand the scientific literature in the field of physical activity and sport in the English language and in other languages of significant presence in the scientific field.
B05	Know and understand the effects of the practice of physical exercise on the structure and function of the human body.
M143	To understand the exercise-related adaptations observed in different population groups.

5. Objectives or Learning Outcomes**Course learning outcomes**

Description

To apply the fundamentals of physiological adaptations after training in the improvement of physical performance.

To discriminate the adaptative responses to exercise in children, women and elders.

To deal with english written scientific literature.

To identify the acute responses and chronic adaptations after an exercise bout/training in people with clinical conditions related to a sedentary lifestyle (e.g., obesity, type 2 diabetes, cardiovascular and metabolic diseases).

To identify the human body responses to exercise in different enviromental conditions.

6. Units / Contents**Unit 1:**

Unit 1.1

Unit 1.2

Unit 2:

Unit 2.1

Unit 2.2

Unit 2.3
Unit 2.4
Unit 3:
Unit 3.1
Unit 3.2
Unit 4:
Unit 4.1
Unit 4.2
Unit 4.3
Unit 4.4
Unit 4.5
Unit 5:
Unit 6:
Unit 7:
Unit 8:
Unit 9:
Unit 10:
Unit 11:
Unit 12:
Unit 13:
Unit 14:
Unit 15:
Unit 16:

7. Activities, Units/Modules and Methodology							
Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Laboratory practice or sessions [ON-SITE]	Project/Problem Based Learning (PBL)	A03 B05 M143	0.8	20	Y	Y	
Practicum and practical activities report writing or preparation [OFF-SITE]	Problem solving and exercises	A03 B05 M143	2.6	65	Y	Y	
Progress test [ON-SITE]	Assessment tests	A03 B05 M143	0.1	2.5	Y	Y	
Analysis of articles and reviews [OFF-SITE]	Reading and Analysis of Reviews and Articles	A03 B05 M143	1	25	Y	Y	
Class Attendance (theory) [ON-SITE]	Lectures	A03 B05 M143	1.5	37.5	Y	Y	
Total:			6	150			
Total credits of in-class work: 2.4			Total class time hours: 60				
Total credits of out of class work: 3.6			Total hours of out of class work: 90				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System			
Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Progress Tests	70.00%	0.00%	
Other methods of assessment	30.00%	0.00%	
Final test	0.00%	100.00%	
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Unit 1 (de 16):	
Activities	Hours
Analysis of articles and reviews [AUTÓNOMA][Reading and Analysis of Reviews and Articles]	6.25
Class Attendance (theory) [PRESENCIAL][Lectures]	9.38
Group 40:	
Initial date: 13-09-2021	End date: 01-10-2021
Unit 2 (de 16):	
Activities	Hours
Analysis of articles and reviews [AUTÓNOMA][Reading and Analysis of Reviews and Articles]	6.25
Class Attendance (theory) [PRESENCIAL][Lectures]	9.38

Group 40:	
Initial date: 04-10-2021	End date: 22-10-2021
Unit 3 (de 16):	
Activities	Hours
Analysis of articles and reviews [AUTÓNOMA][Reading and Analysis of Reviews and Articles]	6.25
Class Attendance (theory) [PRESENCIAL][Lectures]	9.37
Group 40:	
Initial date: 25-10-2021	End date: 19-11-2021
Unit 4 (de 16):	
Activities	Hours
Analysis of articles and reviews [AUTÓNOMA][Reading and Analysis of Reviews and Articles]	6.25
Class Attendance (theory) [PRESENCIAL][Lectures]	9.37
Group 40:	
Initial date: 22-11-2021	End date: 17-12-2021
Unit 5 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.54
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 13-09-2021	End date: 17-09-2021
Unit 6 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	3.08
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	10
Group 40:	
Initial date: 20-09-2021	End date: 08-10-2021
Unit 7 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.54
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 11-10-2021	End date: 15-10-2021
Unit 8 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.54
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 18-10-2021	End date: 22-10-2021
Unit 9 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.54
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 25-10-2021	End date: 29-10-2021
Unit 10 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	3.08
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	10
Group 40:	
Initial date: 08-11-2021	End date: 12-11-2021
Unit 11 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.53
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 15-11-2021	End date: 26-11-2021
Unit 12 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	1.54
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	5
Group 40:	
Initial date: 29-11-2021	End date: 03-12-2021
Unit 13 (de 16):	
Activities	Hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	3.08
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	10
Group 40:	
Initial date: 13-12-2021	End date: 17-12-2021
Unit 14 (de 16):	
Activities	Hours

Progress test [PRESENCIAL][Assessment tests]	.5
Group 40:	
Initial date: 08-10-2021	End date: 08-10-2021
Unit 15 (de 16):	
Activities	Hours
Progress test [PRESENCIAL][Assessment tests]	1
Group 40:	
Initial date: 12-11-2021	End date: 12-11-2021
Unit 16 (de 16):	
Activities	Hours
Progress test [PRESENCIAL][Assessment tests]	1
Group 40:	
Initial date: 22-12-2021	End date: 22-12-2021
Global activity	
Activities	hours
Laboratory practice or sessions [PRESENCIAL][Project/Problem Based Learning (PBL)]	18.47
Practicum and practical activities report writing or preparation [AUTÓNOMA][Problem solving and exercises]	60
Progress test [PRESENCIAL][Assessment tests]	2.5
Analysis of articles and reviews [AUTÓNOMA][Reading and Analysis of Reviews and Articles]	25
Class Attendance (theory) [PRESENCIAL][Lectures]	37.5
Total horas: 143.47	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Astrand, P-O. y Rodahl.	Fisiología del Trabajo Físico.	Editorial Médica Panamericana	Madrid		1992	
Brooks, G.A., y Fahey, T.D.	Exercise Physiology; Human Bioenergetics and its Applications	Macmillan Publishing Co	New York		1984	
López Chicharro y Fernández Vaquero.	Fisiología del Ejercicio.	Editorial Médica Panamericana	Madrid		2010	
McArdle, W., Katch, F. y Katch, V.	Fisiología del Ejercicio	Alianza Deporte	Madrid		1991	
Ricardo Mora Rodríguez	Fisiología del deporte y del ejercicio; practicas de campo	Medica Panamericana	Madrid	9788498352702	2010	
Wasserman K., Hansen JE., Sue DY., Stringer WW., Whipp BJ	Principles of Exercise Testing and Interpretation	Wolters Kluwer		9781609138998	2011	Libro de texto para la interpretación de ergoespirometrías tanto en el ámbito del rendimiento como clínico
Wilmore, J.H., Costill, D.L.	Fisiología del Esfuerzo y del Deporte.	Ed. Paidotribo	Barcelona	9788480199162	2010	