



### **Further Ergonomics**

Code: 103007 ECTS Credits: 6

Degree	Туре	Year	Semester
2500892 Physiotherapy	ОТ	4	2

#### Contact

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### **Teaching groups languages**

You can check it through this <u>link</u>. To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

### **Prerequisites**

Students should have obtained the subject of anatomy and biomechanics and public health of 3rd.

### **Objectives and Contextualisation**

This subject intends to establish and deepen the knowledge and evaluation bases, of the social environment and the work of the individual and giving tools for the prevention, measurement and treatment of problems related to ergonomics and its usefulness in everyday life.

### Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Express ideas fluently, coherently and correctly, both orally and in writing.
- Intervene in the areas of promotion, prevention, protection and recovery of health
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Solve problems.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

### **Learning Outcomes**

- 1. Adopt suitable preventive measures for avoiding injuries, thus promoting workplace health and comfort.
- 2. Analyse a situation and identify its points for improvement.
- 3. Communicate using language that is not sexist.
- 4. Consider how gender stereotypes and roles impinge on the exercise of the profession.
- 5. Critically analyse the principles, values and procedures that govern the exercise of the profession.
- 6. Express ideas fluently, coherently and correctly, both orally and in writing.
- 7. Identify situations in which a change or improvement is needed.
- 8. Identify the principal forms of sex- or gender-based inequality present in society.
- 9. Identify the social, economic and environmental implications of academic and professional activities within one?s own area of knowledge.
- 10. Propose new methods or well-founded alternative solutions.
- 11. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
- 12. Propose projects and actions that incorporate the gender perspective.
- 13. Propose ways to evaluate projects and actions for improving sustainability.
- 14. Solve problems.
- 15. Weigh up the impact of any long- or short-term difficulty, harm or discrimination that could be caused to certain persons or groups by the actions or projects.
- 16. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.

#### Content

The human movement and its control by the central nervous system are studied.

In this matter we study the procedures necessary to identify and perform the treatment physiotherapy, more appropriate to the alterations of the locomotor system, as well as its prevention. I also know they develop procedures for the promotion of health through the movement. In addition they develop the mechanisms and tools to establish the diagnosis of physiotherapy for alterations derived from the pathology and / or processes and activities that have an impact on the good maintenance of body ergonomics. Approaching the ergonomic and anthropometric principles and guidelines for good clinical practice. Ergonomics and occupational health. Prevention of injuries derived from the postural alterations inherent to the work areas, domestic, material, etc.

### Methodology

Master classes with practical sessions in the laboratory and ICT support with specialized seminars.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

#### **Activities**

Title Hours ECTS Learning Outcomes

Type: Directed

LABORATORY PRACTICES (PLAB)	10	0.4	1, 6, 14
THEORY (TE)	33	1.32	1, 6, 14
Type: Autonomous			
PERSONAL STUDY	24	0.96	1
WORKING / READING OF ARTICLES / REPORTS OF INTEREST	24	0.96	1, 6, 14

#### Assessment

Test type 60 'duration with a global weight of 50% of the final grade.

40 multiple choice questions. 4 options, only 1 correct. Each correct answer will evaluate 1 point.

Errors remain 0.25. The unanswered answers do not discount. Minimum grade of 5 out of 10 to approve.

There will be 2 partials that release note if they exceed a minimum of 5.

Practical test:

Evaluation of the seminars: 15% of the final grade.

Resolution of clinical cases: 35% of the final grade.

Mandatory attendance at the internship. Less than 80% of assistance, will mean the suspense of the assistance and the practical part.

Students will be able to present themselves to a recovery test (of knowledge, abilities and attitudes that have been obtained during the course) ifany of the parts of the assessment have been suspended.

Art 116.8. When it is considered that the student has not been able to provide sufficient evidences of evaluation in the act it is will assign this subject as not evaluable Erasmus students contact the teacher in charge of the subject.

# Unique assessment

Theoretical part:

There will be an exam with all the content of the subject

Practical part:

The practical part NOT is mandatory attendance. The assessment will take place on thesame day as the theoretical part, on day fixed at the end of the course.

The same re-take system will be applied as for continuos assessment.

The reviw of the final qualification follows the same procedure as for the continuos assessment.

#### **Assessment Activities**

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation of the seminars	15%	12	0.48	1, 14
Resolution of clinical cases	35%	12	0.48	1, 5, 2, 3, 6, 9, 8, 7, 16, 13, 10, 11, 12, 14, 4, 15
Students will be able to present themselves to a recovery test	50%	35	1.4	1, 5, 2, 3, 6, 9, 8, 7, 16, 13, 10, 11, 12, 14, 4, 15

### **Bibliography**

#### ARTICLES:

- Gras P., Casillas Jm., Dulieu V., Didier JP., La marxa, Enciclopedia Médico Quirúrgica Elsevier, Paris, 1996.
- Barette G., Decourcele O., Triadou P., Ergonomía, kinesitherapie et santé au travail, EMC, Paris, 2007.
- -(9) NOGAREDA, C. La carga mental de trabajo: definición y evaluación Nota técnica de prevención 179, C. N. C. T, Barcelona, 1986 Carga mental en el trabajo hospitalario. Guía para su valoración Nota técnica de prevención 275, C. N. C. T, Barcelona, 1991
- -U.G.T. de España: Informe.

Consultation bibliography:

- Blum B., Los estiramientos: métodos actuales de stretching, desarrollan la flexibilidad y elasticidad,

mejoran la salud y el rendimiento, alivian los dolores articulares y evitan las lesiones., Ed. Hispano Europea, Barcelona, 1998.

- Esnault M., Estiramientos analíticos en fisioteràpia activa, Ed. Masson, Barcelona, 1996.
- Sharman S., Diagnóstico y tratamiento de las alteracions del movimiento, Ed. Paidotribo, Barcelona, 2005.
- M. Hall C., Thein Brody L., Ejercicio terapéutico recuperación funcional, Ed. Paidotribo, 2006.
- Liehmon W., Exercice prescription and the back, Ed. McGraw Hill, New York, 2001.
- Gotlob A., Entrenamiento muscular diferenciado: Tronco y columna vertebral, Ed. Paidotribo.
- Kaltenborn FM., Fisioterapia manual columna, Ed. McGraw Hill Interamericana,
- Wilmore JH., Costill DL., Fisiologia del esfuerzo y el deporte, Ed. Paidotribo, 5ª edición,
- Bienfait M., Bases fisiológicas de la teràpia manual y la osteopatia, Ed. Paidotribo, 2ª edición, Barcelona, 2001.
- -UNE-EN ISO 10075-2001 Principios ergonómicos relativos a la carga de trabajo mental. Partes 1 y 2: Términos y definiciones generales. Principios de diseño

#### Internet resources

- Asociación española de ergonomía (2002). españa. www.ergonomos.es/legal.php

- Mayor Virginia. (24 noviembre 2011). Tipos de ergonomía. España. http://slideshare.net/VirginiaMB/tipos-de-ergonomia

## Software

No specific software is required