

Información del Plan Docente

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| Academic Year | 2017/18 |
| Faculty / School | 100 - Facultad de Ciencias |
| Degree | 447 - Degree in Physics |
| ECTS | 6.0 |
| Year | 3 |
| Semester | First semester |
| Subject Type | Compulsory |
| Module | --- |

1.General information**1.1.Introduction****1.2.Recommendations to take this course****1.3.Context and importance of this course in the degree****1.4.Activities and key dates****2.Learning goals****2.1.Learning goals****2.2.Importance of learning goals****3.Aims of the course and competences****3.1.Aims of the course****3.2.Competences****4.Assessment (1st and 2nd call)****4.1.Assessment tasks (description of tasks, marking system and assessment criteria)****5.Methodology, learning tasks, syllabus and resources****5.1.Methodological overview****5.2.Learning tasks****5.3.Syllabus**

T1.- Historical introduction to thermodynamics.

26922 - Thermodynamics

T2.- The problem and the postulates

T3 .- The conditions of equilibrium.

T4.- Formal relationships.

T5.- Sample systems.

T6.- Processes and the maximum work theorem.

T7.- Thermal engines.

T8 .- Alternatives formulations and Legendre transformation.

T9.- Thermodynamic potentials

T10 .- Maxwell relations

T11. Stability of thermodynamic systems

T12. Phase transitions

T13. Properties of material

5.4.Course planning and calendar

5.5.Bibliography and recommended resources

- BB Callen, Herbert B.. Termodinámica : Introducción a las teorías físicas de la termostática del equilibrio y de la termodinámica irreversible / Herbert B. Callen ; traducción, Manuel Zamora Carranza . - [1a ed.] Madrid : AC, D.L. 1981
- BB Callen, Herbert B.. Thermodynamics and an introduction to thermostatistics / Herbert B. Callen . - 2nd ed. New York : John Wiley and Sons, cop. 1985
- engel, Yunus A.. Termodinámica / Yunus A. Çengel, Michael A. Boles ; revisión técnica, Abraham Laurencio Martínez Bautista ... [et al.] . 8ª ed. Mexico [etc.] : McGraw-Hill Interamericana, D.L. 2015
- BC Landau, Lev Davydovich. Curso de Física Teórica. Vol. 5, Física estadística / L.D. Landau, E.M. Lifshitz. - Ed. en español, reimp. Barcelona [etc.] : Reverté, imp. 2002
- BC Moran, Michael J.. Fundamentos de termodinámica técnica / Michael J. Moran, Howard N. Shapiro . - 2ª ed. en español Barcelona [etc.] : Reverté, D.L. 2004