

TEACHING MODULES INFORMATION

EMJMD WACOMA (academic year 2018/19)

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| 1. | Module Title: Remote Sensing: management applications | | | | | | | | | | | | | | | |
| 2. | Module Code: | | | | | | | | | | | | | | | |
| 3. | Maximum Number of Students: No limit | | | | | | | | | | | | | | | |
| 4. | Total ECTS Credits: 2 ECTS | | | | | | | | | | | | | | | |
| 5. | Month: First year, second semester | | | | | | | | | | | | | | | |
| 6. | <p>Notional Learning Hours (Please fill a number in box): (a) Contact Time - e.g in the classroom, or fieldwork (b) Private Study - reading time, preparing and taking assessments</p> <p>Format of Teaching:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Lectures</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 30%;">Hours (a)</td> </tr> <tr> <td>Laboratories or Practicals</td> <td style="text-align: center;">Hours</td> <td></td> </tr> <tr> <td>Other (computer workshops)</td> <td style="text-align: center;">10</td> <td>Hours (a)</td> </tr> <tr> <td>Other (tutorials)</td> <td style="text-align: center;">Hours</td> <td></td> </tr> <tr> <td>Other (private study)</td> <td style="text-align: center;">36</td> <td>Hours (b)</td> </tr> </table> <p>Teaching Strategy: Theoretical lectures in support of practical exercises in the computer laboratory. Lectures: general background on Remote Sensing applied to the Earth Observation with emphasis on the management applications. Computer workshops: practical lessons related to the lectures content. Use of Bilko software for satellite data and image processing.</p> | Lectures | 4 | Hours (a) | Laboratories or Practicals | Hours | | Other (computer workshops) | 10 | Hours (a) | Other (tutorials) | Hours | | Other (private study) | 36 | Hours (b) |
| Lectures | 4 | Hours (a) | | | | | | | | | | | | | | |
| Laboratories or Practicals | Hours | | | | | | | | | | | | | | | |
| Other (computer workshops) | 10 | Hours (a) | | | | | | | | | | | | | | |
| Other (tutorials) | Hours | | | | | | | | | | | | | | | |
| Other (private study) | 36 | Hours (b) | | | | | | | | | | | | | | |
| 7. | Convener: Jesús Gómez-Enri | | | | | | | | | | | | | | | |
| 8. | Institution: University of Cadiz | | | | | | | | | | | | | | | |
| 9. | Level: MASTER | | | | | | | | | | | | | | | |
| 10. | Language(s) of Tuition: ENGLISH | | | | | | | | | | | | | | | |
| 11. | Pre-requisites: Basic computer skills. | | | | | | | | | | | | | | | |
| 12. | Co-requisites: None | | | | | | | | | | | | | | | |

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| 13. | <p>Programme(s) for which module is core: Erasmus Mundus Joint Master Degree in Water and Coastal Management (WACOMA)</p> |
| 14. | <p>Module Description - The Purpose or Aims:</p> <p>Understanding the basis of Remote Sensing applied to Earth Observation:</p> <ul style="list-style-type: none"> - Introduction - Electromagnetic Radiation - Useful concepts in Remote Sensing - Ocean Remote Sensing techniques - Management Applications |
| 15. | <p>Learning Outcomes:</p> <p>At the end of this course the students should:</p> <ul style="list-style-type: none"> - Know the basic principles of Remote Sensing - Know the main techniques for Ocean Remote Sensing - Know how to process satellite data |
| 16. | <p>Summary of Course Content:</p> <p>Theory:</p> <ul style="list-style-type: none"> - Introduction - Electromagnetic Radiation - Useful concepts in Remote Sensing - Ocean Remote Sensing techniques - Management Applications <p>Computer workshops</p> <ul style="list-style-type: none"> - Bilko: Introduction to Bilko. Basic principles of satellite image analysis. - Bilko: Practical lesson related to the management of the coastal zone. |
| 17. | <p>Key Skills Taught:</p> <ul style="list-style-type: none"> - Ability to process Ocean Remote Sensing data - Ability to use satellite data for the management of the coastal zone |
| 18. | <p>Assessment Methods:</p> <p>Students will answer questions in the practical lessons. Their score will be based upon the correctness of their answers.</p> |

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| 19. | <p>Assessment Criteria: A successful candidate should have or be able to do the following:</p> <p><i>Threshold</i> A basic understanding of the appropriate science and modelling approach and a reasonable understanding of the model results and their implications.</p> <p><i>Good</i> A good understanding of the science and correct model results which are presented and interpreted to a good standard, with some reference to independent literature data and results.</p> <p><i>Excellent</i> A good to excellent understanding of the science and correct model results which are presented and interpreted to a high standard, with plenty of references used for comparisons and to critically evaluate the results.</p> |
| 20. | <p>Resource Implications of Proposal and Proposed Solutions:</p> <p><i>Core texts</i></p> <p>Robinson, I (2004). Measuring the Oceans from Space. Springer-Verlag Berlin Heidelberg. 670 pp. Robinson, I. (2010). Discovering the Ocean from Space. Springer-Verlag Berlin Heidelberg. 638 pp.</p> |
| 21. | <p>Does this module replace existing provision? If so, please indicate modules to be replaced: This module fits in the area of “Environmental Impacts and Management”.</p> |
| 22. | <p>Start Date: First year, second semester</p> |
| 23. | <p>Is it intended that the module be available every year? Yes</p> |