

COURSE IN E-HEALTH AND TELEMEDICINE

Course organization

Teaching methods of the course consist of a combination of e-learning lectures (net-based activities divided in didactic units) and regular and compact lectures, delivered either face-to-face (the first lectures only) and via videoconferencing.

Didactic units are the basis of e-learning activity. Each didactic unit is divided in modules (see below). Modules are the core of the syllabus and correspond to one or groups of lectures per each different topic (module). Each module is articulated into lectures, accompanied by specific texts enlarging and integrating lecture's contents. These texts are placed in the module's library.

Bibliographic materials necessary to complete topics covered in single modules, will be available in the library of each module. Further bibliographic resources of more general or specific interest for attendants will be included in the Course main library. Materials will be classified per didactic unit. The main library is a documentation facility which will be continuously updated. It will be active also after the end of the Courses.

Regular lectures will be delivered via videoconferencing and will be centered on selected topics basically presented also via e-learning. **Attendance of at least the 51% of regular lectures is required for being admitted to the final examination.**

Drills/exercises will include practical activities of assistance of patients or of handling particular situations and are designed for improving capabilities of attendants to increase their awareness in eHealth and telemedicine. Drills attendance is compulsory.

Syllabus

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| 1. e-Health without borders | |
| 1 | <i>Introduction to the course Telemedicine history, purposes and organization. The teleconsultation.</i> |
| 2 | <i>International regulations in e-health and telemedicine.</i> |
| 3 | <i>Informed consent in telemedicine. Confidentiality and privacy of telemedical information.</i> |
| 2. Telecommunication systems and their use in transferring biological and medical data | |
| 4 | <i>Telecommunication systems applied to telemedicine. Potentialities and applications. Telemedical devices: main technical aspects</i> |
| 5 | <i>Internet applications in medicine. Health web sites</i> |
| Practical activity: Medical sites on internet. Practical drill of how to find relevant medical guidelines from authoritative sources | |
| 3. Organization of health-care systems. Organization, collection, handling and use of medical data in telemedicine | |



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| 6 | <i>Medical assistance of remote patients: problems and potentialities. Lessons form maritime telemedicine.</i> |
| 7 | <i>Medical data bases and electronic medical records</i> |
| 8 | <i>Telepharmacy and appropriate use of drugs in evolved e-health system</i> |
| Practical activity: Development and consultation of electronic medical records. Levels of responsibility and rights of patients. | |
| 4. Practical applications of telemedicine | |
| 9 | <i>Telemedicine and in loco assistance of patients</i> |
| 10 | <i>Teleradiology, diagnostic imaging.</i> |
| 11 | <i>Telecardiology</i> |
| 12 | <i>Diagrams in medicine for decision analysis</i> |

Organization of didactic activities

Didactic activities of the course in eHealth and Telemedicine will include:

- Frontal lectures (only 2, the first on Thursday 10th May, from 16:00 to 18:00 and the second on Monday 14th May, from 16:00 to 18:00)

Venue of frontal lectures: Theatre of the former Department of Experimental Medicine and Public health

- Videoconference lectures: They will follow on May 17, 21,24,28,31, June 4, 7, 11 and 14. The purpose of videoconference lectures is to introduce attendants to the topics of the e-learning modules that students will then follow autonomously.

- Drills (practical lectures) dates/venue will be notified.

- e-Learning. Each student will receive his own username and password to access the e-learning platform of the course. The e-learning platform includes a foreword summarizing the topics covered in the module, one or more lectures in scorm format, plus bibliographic materials.