

<b>Module: New Trends in Educational Technology</b>	
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copyright	<p><b>whether copyright or other restrictions apply to the use of this object</b></p> <p>Copyright by author/creator. Free distribution during and within the IAA study group members; For any other use, request permission.</p>
languages of instruction	<p><b>at least English, but more languages are also welcome</b></p> <p>English and Greek</p>
educational goals and objectives	<p><b>broad and specific purposes or goals</b></p> <p>This module aims to:</p> <ul style="list-style-type: none"> <li>▪ introduce students to trends related with advances in educational technology, especially as used in medical and biomedical sciences</li> <li>▪ familiarize students with relevant terminology</li> <li>▪ make students aware of issues and difficulties in preparing and deploying educational processes using technology</li> <li>▪ provide students with an indicative list of available technological options, methods and tools for developing educational material/objects</li> </ul>
educational context	<p><b>principal environment within which the learning and use of this module is intended to take place, e.g. undergraduate preclinical, undergraduate clinical, postgraduate, residency, continuous education, etc</b></p> <p>This module is meant to be part of:</p> <ol style="list-style-type: none"> <li>a. a basic module in Medical Informatics within an postgraduate course intended for medical science students (e.g. MSc in Medical Research Methodology/Technology, general educational programs for residents, etc)</li> <li>b. a basic module in Medical Informatics and/or related topics intended for undergraduate medical students</li> <li>c. an introductory module in Information Technology Standards intended for applied sciences/engineering at a postgraduate level</li> </ol>
learning outcomes	<p><b>what students will know and be able to do as a result of engaging in the learning process of this specific educational module</b></p> <p>By the end of this module students will be able to:</p> <ol style="list-style-type: none"> <li>1. create a list of the steps involved in the educational process</li> <li>2. explain the relative merits and requirements for contemporary teaching strategies/methods</li> <li>3. use modern Web 2.0 tools for collaborative learning</li> <li>4. discuss and critique the issues of concern with new educational technology trends</li> </ol>

	<ol style="list-style-type: none"> <li>5. select and utilize suitable tools to develop electronic educational material</li> <li>6. design a framework for applying educational information standards</li> <li>7. prepare electronic educational material according to educational information standards and the selected framework</li> </ol>
content outline	<p><b>description of the content of the educational object</b></p> <ol style="list-style-type: none"> <li>1. Updating the educational process: the support of Information Technology (IT)</li> <li>2. the process of educational module design</li> <li>3. contemporary teaching methods: eLearning, ePBL, eInteraction</li> <li>4. development of educational material</li> <li>5. eLearning platforms platforms and web collaborations environments</li> <li>6. subsystems and functionality of Learning Management Systems (LMS)</li> <li>7. the design of SCORM-compliant educational material for LMS</li> <li>8. methods and tools for evaluation of and/or by students</li> <li>9. accreditation issues</li> <li>10. new trends (wikis, blogs, mobile learning, etc)</li> <li>11. Knowledge management and quality issues</li> </ol>
keywords	<p><b>keywords or phrases describing the object</b></p> <p>teaching/learning, eLearning, web collaboration environments, LMS, accreditation, SCORM standard</p>
teaching methods & strategies	<p><b>lecture, discussion, case study, problem solving, etc</b></p> <p>A lecture (prerecorded available for download or on the web or via teleconferencing) supported by a discussion forum.</p>
type	<p><b>e.g. exercise, questionnaire, figure, index, exam, problem statement, simulation, diagram, graph, slide, experiment, self assessment, presentation slides, worksheet, video, reading material, exam sheet, graph, etc.</b></p> <ul style="list-style-type: none"> <li>▪ powerpoint presentation or flash material on the web</li> <li>▪ video</li> <li>▪ discussion forum</li> <li>▪ reading material (published papers from the literature)</li> <li>▪ self assessment on the web</li> </ul>
instructions for use	<p><b>comments on how this object is to be used by an educator other than the creator</b></p> <ol style="list-style-type: none"> <li>1. Make sure the students attend the lecture and go through the video.</li> <li>2. For educational context (a) use content items 1-4 and 8-11. For educational context (b) use content items 1-4, 8 and 10-11. For educational context (c) use content items 1-11.</li> <li>3. A list of possible discussion topics (an guidelines for discussion deployment) is provided for the teacher to use after the lecture according to audience type (under/post graduate,</li> </ol>

	<p>medical/technical, etc.). The discussion can be carried out within the lecture theatre or via a discussion forum on the web under the supervision of the instructor. Upon request, the discussion forum can be coordinated by the creator of the educational module.</p> <p>4. Invite students to go through the self-assessment exercises.</p> <p>5. Go back to discussion, if necessary.</p>
instructions hours / workload	<p><b>approximate or typical time it takes to work with this object</b></p> <ul style="list-style-type: none"> <li>▪ lecture: 2-4 hours (depending on educational context)</li> <li>▪ video: 10 min</li> <li>▪ discussion: 1-2 hours</li> <li>▪ reading: 4 hours</li> <li>▪ self-assessment: 20 min</li> </ul>
indicative bibliography	<p><b>a list of basic references and/or other related educational resources</b></p> <p>P D Bamidis, S Konstantinidis, C L Papadelis, E Perantoni, C Styliadis, C Kourtidou-Papadeli, and C Pappas, "An e-learning platform for Aerospace Medicine", Hippokratia. 2008 August; 12(Suppl 1): 15–22.</p> <p>Boulos MN, Maramba I, Wheeler S. Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. BMC Med Educ. 2006 Aug 15;6:41</p> <p>P. D. Bamidis, M. M. Nikolaidou, S. T. Konstantinidis, C. Pappas, "A Proposed Framework for Accreditation of Online Continuing Medical Education," cbms,pp.693-700, Twentieth IEEE International Symposium on Computer-Based Medical Systems (CBMS'07), 2007</p>
life cycle	<p><b>what is the expected lifetime of the object – when new updates should be provided</b></p> <p>The material will be enriched monthly until it is completed. Overall evaluation and update will be done annually.</p>