

EDUCATIONAL SOFTWARE DESIGN AND EVALUATION

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| 1 | Course Title: | EDUCATIONAL SOFTWARE DESIGN AND EVALUATION |
| 2 | Course Code: | BIL0002 |
| 3 | Type of Course: | Optional |
| 4 | Level of Course: | First Cycle |
| 5 | Year of Study: | 2 |
| 6 | Semester: | 3 |
| 7 | ECTS Credits Allocated: | 4.00 |
| 8 | Theoretical (hour/week): | 2.00 |
| 9 | Practice (hour/week): | 0.00 |
| 10 | Laboratory (hour/week): | 0 |
| 11 | Prerequisites: | --- |
| 12 | Language: | Turkish |
| 13 | Mode of Delivery: | Face to face |
| 14 | Course Coordinator: | Doç. Dr. ERHAN ŞENGEL |
| 15 | Course Lecturers: | |
| 16 | Contact information of the Course Coordinator: | Doç. Dr. Erhan Şengel drerhansengel@gmail.com, +90 (224) 294 21 80 Eğitim Fakültesi A Blok Oda: 413 |
| 17 | Website: | |
| 18 | Objective of the Course: | It is the purpose of this course to help students learn the fundamental concepts and principles for designing, developing and evaluating software for educational contexts. Students gain skills to develop and evaluate educational multimedia. They reinforce their understanding by working on multimedia hands-on through up-to-date educational design software. |
| 19 | Contribution of the Course to Professional Development: | |
| 20 | Learning Outcomes: | |
| | 1 | Explains the concept of computer-based instruction. |
| | 2 | Recognizes the authoring software common to the PC environment. |
| | 3 | Uses at least one type of authoring software to prepare educational software. |
| | 4 | Defines the process of course software preparation and plans the process according to the authoring software. |
| | 5 | Knows the purpose, the importance and the function of scenarios in software design and is able to prepare scenario. |
| | 6 | Knows and is able to perform user interaction, feedback, navigation, graphical design and arrangement in multimedia design. |
| | 7 | Is able to add images, videos, animation, and so forth based on instructional design principles. |
| | 8 | Knows the test design principles in computer-based instruction and is able to design tests. |
| | 9 | Defines the procedures and the techniques for preparing and evaluating multimedia applications. |
| | 10 | Is able to evaluate multimedia applications. |
| 21 | Course Content: | |

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| Week | Theoretical | Practice | | |
| 1 | The history and evolution of computer-based instruction (CBI) | | | |
| 2 | Types of CBI I – Tutorials. Types of CBI II – Hypermedia. | | | |
| 3 | Types of CBI III Practice-Application Software Types of CBI IV – Simulations. Getting to know the Adobe Captivate program. Getting to know the Adobe Captivate interface. | | | |
| 4 | Types of CBI V – Educational Games. Types of CBI VI – Open-ended Learning Environments. Software training (recording modes). Full motion recording (FMR). Image slideshows. | | | |
| 5 | Slides Text captions. Images and drawing objects. | | | |
| 6 | Types of CBI VII – Measurement and Assessment. | | | |
| Activities | | Number | Duration (hour) | Total Work Load (hour) |
| Theoretical | Working with audio. | 14 | 2.00 | 28.00 |
| Practicals/Labs | | 14 | 2.00 | 28.00 |
| Self study | Organizing projects and interactive objects. | 13 | 3.00 | 39.00 |
| Homeworks | | 1 | 15.00 | 15.00 |
| Projects | Variables, actions and widgets. | 0 | 0.00 | 0.00 |
| Field Studies | | 0 | 0.00 | 0.00 |
| Midterm Exams | Questions and question pools. | 1 | 10.00 | 10.00 |
| Others | | 0 | 0.00 | 0.00 |
| Final Exam | Reviewing a project. | 1 | 60.00 | 60.00 |
| Total Work Load | | | | 180.00 |
| Total work load/ 30 hr | | | | 6.00 |
| ECTS Credit of the Course | | | | 4.00 |
| SCORM. | | | | |
| 13 | SCORM (continued). Evaluating computer based instructional materials – the concept of quality software. | | | |
| 14 | The purpose and the methods in software evaluation. | | | |

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| 22 | Textbooks, References and/or Other Materials: | <p>Alessi, M. & Trollip, S. (2001). Multimedia for learning: Methods and development (3rd. ed). Boston: Allyn & Bacon.</p> <p>İpek, İ. (2001). Bilgisayarla öğretim, tasarım, geliştirme ve yöntemler. Ankara: Tıp Teknik.</p> <p>Şimşek, N. (1998). Bilgisayar yazılımlarının değerlendirilmesi. Ankara: Siyasal Kitabevi.</p> <p>Silverman, F. H. (1998). Authoring books and materials for students. Academics and Professionals.</p> <p>Diğer Kaynaklar</p> <p>Odabaşı, F. (1998). Bilgisayar destekli eğitim (Ünite 8). Hoşcan, Ş. ve diğerleri (editörler) İlköğretim öğretmenliği lisans tamamlama programı: Bilgisayar içinde. Anadolu Üniversitesi Yayınları: Eskişehir</p> |
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| 23 | Assesment |
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| TERM LEARNING ACTIVITIES | NUMBER | WEIGHT |
|--|-------------------------------|--------|
| Midterm Exam | 1 | 25.00 |
| Quiz | 0 | 0.00 |
| Home work-project | 1 | 25.00 |
| Final Exam | 1 | 50.00 |
| Total | 3 | 100.00 |
| Contribution of Term (Year) Learning Activities to Success Grade | | 50.00 |
| Contribution of Final Exam to Success Grade | | 50.00 |
| Total | | 100.00 |
| Measurement and Evaluation Techniques Used in the Course | | |
| 24 | ECTS / WORK LOAD TABLE | |

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| 25 | CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | |
| | PQ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contribution Level: | 1 very low | | 2 low | | 3 Medium | | 4 High | | 5 Very High | | | | | | | |