| 1. | Course Title | Internet technologies |
|---|---|---|
| 2. | Code | F18L2S110 |
| 3. | Study program | Software engineering and information systems |
| 4. | Study Program Organizer | Faculty of Computer Science and Engineering |
| 5. | Degree (first, second, third cycle) | first cycle |
| 6. | Academic year / semester<br>2 / summer / mandatory | 7. ECTS credits<br>6 |
| 8. | Teacher | associate professor Goce Armenski, assistant professor Magdalena Kostoska |
| 9. | Course enrollment prerequisites | Објектно-ориентирано програмирање |
| 10. | Course program goals (competencies):<br>Knowledge of the mechanisms in the HTTP protocol. Introduction to Internet Application Development Platforms. Creating and developing web apps. Creating and using web services. | |
| 11. | Course program content:<br>Architecture of dynamic web applications. Web communication. Introduction to Web Application Development. Introduction to ASP.NET. Basics of web forms. Web controls. Master pages and themes. Management of conditions. Navigation. Working with databases. Working with databases. Web application security. SOA and web services. MVC | |
| 12. | Learning methods:<br>Lectures using presentations, interactive lectures, exercises (using equipment and software packages), teamwork, case studies, invited guest lecturers, independent preparation and defense of a project assignment and seminar work. | |
| 13. | Total available time | 6 ECTS x 30 hours = 180 hours |
| 14. | Distribution of the available time | 30 + 45 + 15 + 15 + 75 = 180 hours |
| 15. | Teaching activity forms | 15.1. Lectures – theoretical teaching | 30 hours |

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|---|---|---|---|---|
| | | 15.2. | Exercises (laboratory, auditory), seminar papers, teamwork | 45 hours |
| 16. | Other activity forms | 16.1. | Project Tasks | 15 hours |
| | | 16.2. | Independent Learning Tasks | 15 hours |
| | | 16.3. | Home learning | 75 hours |

| 17. | Assessment methodology | |
|---|---|---|
| 17.1. | Tests | 10 points |
| 17.2. | Seminar paper/project (presentation: written and oral) | 10 points |
| 17.3. | Activity and learning | 10 points |
| 17.4. | Final exam | 70 points |

| 18. | Assessment criteria (points/grade) | up to 50 points | 5 (five) (F) |
|---|---|---|---|
| | | 51 to 60 points | 6 (six) (E) |
| | | 61 to 70 points | 7 (seven) (D) |
| | | 71 to 80 points | 8 (eight) (C) |
| | | 81 to 90 points | 9 (nine) (B) |
| | | 91 to 100 points | 10 (ten) (A) |

| 19. | Course completion and final exam requirements | Realized activities 15.1 and 15.2 |
|---|---|---|
| 20. | Teaching Language | Macedonian and English |
| 21. | Teaching quality evaluation method | Internal evaluation mechanisms and questionnaires |

| 22. | Course Material | |
|---|---|---|
| 22.1. | Mandatory course material | |

| | No. | Author | Title | Publisher | Year |
|---|---|---|---|---|---|
| | 1 | Andrew Troelsen, Phillip Japikse | C# 6.0 and the .NET 4.6 Framework | Apress | 2015 |
| | 2 | Imar Spaanjaars | eginning ASP.NET 4.5.1: in C# and VB | Wrox | 2014 |
| | 3 | Matthew MacDonald | Beginning ASP.NET 4.5 in C# 2012 | Apress | 2012 |
| | 4 | Ralph F. Groove | Web-Based Application Development | Jones and Bartlett Publishers LCC | 2010 |
| 22.2. | Additional course material | | | | |
| | No. | Author | Title | Publisher | Year |
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