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|---|--|---------|--------------------------------|----|-----|-----|
| <b>Institute of Software Design and Development</b> |  |         | Elective subject:<br>2025-26-2 |    |     |     |
| Course title:                                       | Code   | Credits | Course hours                   |    |     |     |
|   |  |         |                                | ea | tgy | lab |
| Web development using PHP/Symphony                  | NSWWD1EBNF   | 6       | Weekly                         | 2  |     | 2   |
| Course leaders: Dr. Király Zoltán                   |  |         | Position: Assistant Professor  |    |     |     |
| Oktató(k): Dr. Király Zoltán                        |  |         |                                |    |     |     |
| Prerequisites:                                      | N_SS1____  |         | Szakmai szigorlat              |    |     |     |
| Assessment method::                                 | exam   |         |                                |    |     |     |
| <b>Course material</b>                              |  |         |                                |    |     |     |
| Learning objectives:                                | Students should familiarize themselves with the basics of PHP programming and advanced PHP programming. Be able to independently create interactive web pages. Be aware of the dangers plaguing websites. Be able to eliminate the most common sources of danger with the help of PHP elements. Learn the basics of the Symfony framework. |         |                                |    |     |     |
| Syllabus:   | Introduction to PHP programming. Management of server-side data, beacons, databases in PHP. PHP Defense Strategies. Commonly used PHP functions. Introduction to the use of the Symfony framework.   |         |                                |    |     |     |

| <b>Semester schedule</b>        |   |
|---------------------------------|---|
| teaching week<br>(consultation) | Thematic unit   |
| 1.                              | Web server, MySQL server PHP compiler installation. Basics of PHP. Characteristics of weakly typed languages. PHP variables, functions, |
| 2.                              | PHP file management, TXT file management, HTML form management  |
| 3.                              | PHP OOP; MySQL management basics, guest book  |
| 4.                              | PDO treatment   |
| 5.                              | Session, cookie management  |
| 6.                              | PHP XML handling, simple, DOM   |
| 7.                              | Midterm 1   |
| 8.                              | PHP DIG, security   |
| 9.                              | PHP error handling  |
| 10.                             | Symfony basig, Twig   |
| 11.                             | Doctrine  |
| 12.                             | Symfony modes   |
| 13.                             | Midterm 2   |
| 14.                             | Supplementary midterm   |

| <b>Midterm Requirements</b>                      |  |
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| Évközi jegy / aláírás megszerzésének feltételei: | Achieving a score of better than 50% on the two tests separately is the signature. |

| <b>Midterm Tests</b> |                                      |
|----------------------|--------------------------------------|
| Teaching Week        | Témakör                              |
| 6                    | Use of PHP basics, MySQL, TXT files  |
| 13                   | Advanced PHP                         |
| 14                   | From the materials of previous tests |

|  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
|--|---|-----------------|----------------------|----------|---------------|----------|----------|----------|------------------|----------|----------|---------|----------|
|  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <b>Requirements for Obtaining a Semester Grade / Signature)</b>  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| The successful (>50%) completion of the two tests is required for the signature.   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <b>Make-up Procedure</b>   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| A ZH / évközi jegy / aláírás pótlásának módja:   | Both tests are made up in the last week.  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <b>Type of Examination</b>   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| Knowledge of the learned elements of PHP and Symfony must be demonstrated in the exam.   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <b>Grading Method for the Exam</b>   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| Final grade = the arithmetic mean of the exam and ZH grades. In all areas min. 50% must be achieved.   |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| How to calculate the value marks:  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Achieved result</td> <td style="width: 70%;">Certificate of Merit</td> </tr> <tr> <td>89%-100%</td> <td>excellent (5)</td> </tr> <tr> <td>76%-88&lt;%</td> <td>good (4)</td> </tr> <tr> <td>63%-75&lt;%</td> <td>satisfactory (3)</td> </tr> <tr> <td>51%-62&lt;%</td> <td>pass (2)</td> </tr> <tr> <td>0%-50&lt;%</td> <td>fail (1)</td> </tr> </table> |   | Achieved result | Certificate of Merit | 89%-100% | excellent (5) | 76%-88<% | good (4) | 63%-75<% | satisfactory (3) | 51%-62<% | pass (2) | 0%-50<% | fail (1) |
| Achieved result  | Certificate of Merit  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| 89%-100%   | excellent (5)   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| 76%-88<%   | good (4)  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| 63%-75<%   | satisfactory (3)  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| 51%-62<%   | pass (2)  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| 0%-50<%  | fail (1)  |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| :  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
|  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
|  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| <b>References</b>  |   |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| Required Reading:  | <p>SensioLabs: Symfony - The Book<br/> <a href="http://symfony.com/doc/current/book/index.html">http://symfony.com/doc/current/book/index.html</a></p> <p><a href="http://w3schools.com/HTML/default.asp">http://w3schools.com/HTML/default.asp</a>;</p> <p><a href="http://w3schools.com/PHP/default.asp">http://w3schools.com/PHP/default.asp</a>;</p> <p><a href="http://uk.php.net/">http://uk.php.net/</a></p> |                 |                      |          |               |          |          |          |                  |          |          |         |          |
| Recommended Reading:   | <p>C. Musciano, B. Kennyedy: HTML &amp; XHTML, The Definitive Guide [O'Reilly, 2000, pdf, ISBN 9780596527327]</p> <p>D. Sklar, A. Trachtenberg: PHP Cookbook [O'Reilly, 2002, pdf, ISBN 9781565926813]</p> <p>J. Castagnetto, H. Rawat, S. Schumann, C. Scollo, D. Veliath: Professional PHP Programming [Wrox Press Ltd, 1999, pdf, ISBN 1-861002-96-3]</p>  |                 |                      |          |               |          |          |          |                  |          |          |         |          |

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|  | M. Maslakowski: Teach Yourself MySQL in 21 Days [Sams, 2000, pdf, ISBN: 9780672319143]<br><a href="http://symfony.com/doc/current/index.html">http://symfony.com/doc/current/index.html</a> |
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