ANEXA 1

SYLLABUS
University year 2024-2025
Year of study II / Semester II

1. Information on academic programme

1.1. University	**"1 Decembrie 1918" University of Alba Iulia**
1.2. Faculty	**Faculty of Informatics and Engineering**
1.3. Department	**Informatics, Mathematics and Electronics**
1.4. Field of study	**Computer Science**
1.5. Cycle of study	**Undergraduate**
1.6. Academic programme / Qualification	**Computer Science / developers ESCO-08: 2511/ Systems Analyst, 2512/ Software developers** **Analyst 251201** **Computer System Programmer 251204** **Computer System Engineer 251203**

2. Information of Course Matter

2.1. Course		WEB applications development			2.2. Code		CSE211
2.3. Course Leader			Lect. Univ. Dr. Cucu Ciprian				
2.4. Seminar Tutor			Lect. Univ. Dr. Cucu Ciprian				
2.5. Academic Year	**II**	2.6. Semester	**II**	2.7. Type of Evaluation (E – final exam/ CE - colloquy examination / CA -continuous assessment)	**E**	2.8. Type of course (C– Compulsory, Op – optional, F - Facultative)	**C**

3. Course Structure

3.1. Weekly number of hours	4	3.2. course	**2**	3.3. seminar, laboratory	**2**
3.4. Total number of hours in the curriculum	56	3.5. course	**28**	3.6. seminar, laboratory	**28**

Allocation of time:	hours
Individual study of readers	**20**
Documentation (library)	**20**
Home assignments, Essays, Portfolios	**20**
Tutorials	**-**
Assessment	**9**
Other activities …….	**-**

3.7 Total number of hours for individual study	69
3.8 Total number of hours in the curriculum	56
3.9 Total number of hours in the curriculum	125
3.10 Number of ECTS **	5

4. Prerequisites (where applicable)

4.1. curriculum-based	Object – oriented programming
4.2. competence-based	- high level language programming

5. Requisites (where applicable)

5.1. course-related	Room equipped with video projector / board / Microsoft Teams Platform
5.2. laboratory-based	Laboratory – computers / Microsoft Teams Platform

6. Specific competences to be aquired (chosen by the course leader from the programme general competences grid)

Professional competences	Programming in high-level languages Development and maintenance of computer applications
Transversal competences	CT1 The application of rules for organized and efficient work, of responsible attitudes towards the scientific and didactic domain, for the creative realization of one'sown potential following the principles and norms of professional. Ethics.

7. **Course objectives (as per the programme specific competences grid)**

7.1 General objectives of the course	*Students should ne able to describe fundamental concepts regarding the functioning of the Internet and be able to design, programm, and implement a simple web application*
7.2 Specific objectives of the course	• Fundamental knowlsedge about trasnmission and displaying infromation on the WEB • Using methods, tools and languages dedicated to creating web applications • The capacity to develop a web application starting from given specifications

8. **Course contents ***

8.1 Course	**Teaching methods**	**Obs.**
1. Working environment, tools. 2. Foundations of PHP – variables, data types, programming structures, PSR introduction 3. Include, require, more PSR rules 4. OOP in Php, PSR for OOP 5. Client-server: URL, URi, URN, HTTP protocol 6. Data transfer in PHP - get & post. 7. MySQL & PHP: procedural, OOP, PDO 8. Sessions, cookies. Unit testing 9. PHP security 10. Web server configurations, deployment, .htaccess	Lecture, discussions, presentation	
8.2.Seminars-laboratories	**Teaching methods**	**Observations**
1. HTML/CSS review 2. Basic PHP programming, parsing text files 3. OOP exercises 4. Data transfer – GET, POST, forms 5. PHP & MySQL – CRUD 6. Class project: freelancer page with DB 7. Sign-up, authentication, session & cookies 8. PHP file upload, unit testing 9. Individual project 10. Deployment, security testing	Discussion, presentation, exercices	

References

1. Robin Nixon, *Learning PHP, MySQL & JavaScript, 6th Edition*. O'Reilly Media, Inc., 2021, ISBN: 9781492093824
2. Chris Snyder, Thomas Myer, Michael Southwell, *Pro PHP Security: From Application Security Principles to the Implementation of XSS Defenses*, Apress; 2nd ed. Edition.
3. David Gourley, Brian Totty, Marjorie Sayer, Anshu Aggarwal, Sailu Reddy, *HTTP: The Definitive Guide (Definitive Guides) 1st Edition,* O'Reilly Media (2002).

9. **Corroboration of course contents with the expectations of the epistemic community's significant representatives, professional associations and employers in the field of the academic programme**

NA

10. **Assessment**

Activity	**10.1 Evaluation criteria**	**10.2 Evaluation methods**	**10.3 Percentage of final grade**
10.4 Course	Final evaluation	*Oral exam: project presentation, questions from study resources*	70%

10.5 Seminar/laboratory	Continous evaluation	*Solving proposed assignments, quizz*	30%

10.6 Minimum performance standard

- Final project must implement CRUD operation in an HTML5 responsive interface
- Oral evaluation: minimum one correct response or three partial correct responses, from 3-5 questions
- Participation in the first exam is predicated on attendance. Recovery is possible through supplemental activities, limited to 50% of the total number of courses and seminars
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Submission date | Course leader signature | Seminar tutor signature

Date of approval by Department | Department director signature

Data Date of approval by Faculty Council | Signature of the Dean