HOLY SPIRIT UNIVERSITY OF KASLIK

Syllabus (Students)

2025-2026

I. Course Information

Academic unit	**School of Engineering**
Department	**Electrical, Telecommunications and Computer Engineering**
Code	**GIN446**
English Title	**Web Programming**
French or Arabic Title *(when applicable)*	
Type	☒ **C** ☐ CTP ☐ TP ☐ P ☐ TD ☐ S ☐ TH
Pre-requisites	**GIN300 & GIN371**
Co-requisites	**-**
Number of credits	**3**
Contact hours per week	**3**
Delivery Language:	☐ French ☒ **English** ☐ Arabic ☐ Other (specify):
Offered	☒ **Fall** ☒ **Spring** ☐ Summer
Current Semester	**Fall 2025-2026 (202610)**
CRN	**11212**
Class Schedule	**MF 15:30-16:45**

II. Course prerequisite knowledge and skills

Prior to registering for the "Web Programming" course, students are expected to possess programming skills, proficiency in software development tools, and a basic knowledge of SQL for database interaction.

III. Instructor

Name and Title	Pascal Damien, Associate Professor
Category	☒ Full-time ☐ Part-time
Office	
Email / Teams	pascaldamien@usek.edu.lb *Replies are to be expected within the following 2 working days*
Office hours	**MF 13:00-14:00**

IV. Course Core Information

Course Description

The "Web Programming" course is a core requirement for Computer Engineering students and serves as a major elective for those majoring in Electrical, Telecommunications, or Biomedical Engineering. This course is designed to provide students with a comprehensive understanding of both client-side and server-side web programming, encompassing a wide range of essential technologies and skills.
Throughout the course, students will delve into fundamental topics such as HTML, CSS, JavaScript, DOM (Document Object Model), PHP, and MySQL. These technologies form the building blocks of modern web development, enabling students to create interactive and dynamic web applications. Additionally, students will gain proficiency in XML and DTD (Document Type Definition) for structured data representation and exchange, further enhancing their web programming capabilities.
By the end of this course, students will be well-versed in web development, equipped with the knowledge and skills needed to design, build, and maintain sophisticated web applications. Whether pursuing a career in computer engineering or related fields, this course provides a solid foundation for success in the digital world.

Course Goals

The course aims to:

1. Provide a Comprehensive Understanding of client-side and server-side web programming, ensuring students grasp the core concepts and techniques.
2. Equip students with proficiency in essential web development technologies, such as HTML, CSS, JavaScript, DOM, PHP, and MySQL, enabling them to build dynamic and interactive web applications.
3. Enable students to effectively manage data, including storage and retrieval from databases using MySQL, to create data-driven web solutions.
4. Introduce students to XML and DTD, facilitating structured data representation and exchange, and enhancing their capacity to work with diverse data formats.
5. Cultivate problem-solving skills by engaging in real-world web development projects, encouraging students to overcome challenges and find innovative solutions.
6. Prepare students for careers in web development and related fields, arming them with the knowledge and skills needed to excel in a dynamic and competitive industry.
7. Foster oral presentation abilities and teamwork through collaborative projects, enhancing students' capacity to communicate and collaborate effectively in a professional web development environment.

Delivery Mode

The "Web Programming" course employs an engaging and dynamic delivery mode designed to immerse students in the world of web development. All sessions include hands-on learning activities where students apply newly acquired web technologies, ensuring immediate practical reinforcement of their knowledge. The course engages students in active learning through the Project-Based Learning (PBL) teaching approach. From day one, students are tasked with constructing a personal website. They begin with a blank canvas and progressively incorporate recently learned web technologies throughout the semester. This immersive approach enables students to culminate their learning experience with a polished and professional website, showcasing their mastery of major web development tools and techniques.

V. Course Learning Outcomes (LOs)

After a successful completion of the course, students will be able to:

1. Design and develop interactive and responsive web interfaces using HTML, CSS, and JavaScript considering best practices for user experience.
2. Employ server-side scripting with PHP to create dynamic web applications, effectively managing data processing and user interactions.
3. Utilize MySQL for database management, including data retrieval, storage, and manipulation within web applications.
4. Implement structured data representation and exchange using XML and DTD, demonstrating proficiency in data integration techniques.
5. Collaborate effectively in a team environment, fostering teamwork, demonstrating effective communication, and delivering oral presentations.
6. Exhibit problem-solving skills by troubleshooting and debugging web applications, ensuring optimal functionality.

VI. Course General Requirements

Writing Requirements

Students must be able to produce clear and concise technical documentation for web projects, including project reports, and code comments. These documents should be comprehensible to both technical and non-technical audiences. Students will analyze and critique web content, design choices, and usability in written assignments. They should present arguments coherently, provide evidence to support their claims, and offer constructive suggestions for improvement.

Oral Requirements

Students will be responsible for delivering oral presentations on their web development projects. These presentations should be well-organized, confidently delivered, and engaging to the audience. Students must effectively communicate design choices, functionalities, and technical aspects.
Active participation in class discussions and group activities is expected. Students should express their thoughts clearly, listen actively to peers, and engage in constructive discussions.

Technical Requirements

Students are expected to possess proficiency in software development tools and a foundational grasp of database management systems.

VII. Course Timetable

Timetable

Week	Topic	LO(s)	Assessment Activities	Learning Activities
1	Introduction to the WWW and the Internet	1	Personal Website	Lectures Online Forums Research Assignment
2,4,6	HTML	1, 5, 6	Personal Website Peer reviews Oral Presentation	Lectures Self-Study Online Forums PBLs Individual/Team Projects
3	CSS	1, 5, 6	Personal Website Peer reviews Oral Presentation	Lectures Self-Study Online Forums PBLs Individual/Team Projects
5,7,8	JavaScript	1, 5, 6	Personal Website Peer reviews Oral Presentations Oral Presentation	Lectures Self-Study Online Forums PBLs Research Assignment Individual/Team Projects
9,10,11	PHP, MySQL	2, 3, 5, 6	Personal Website Peer reviews Oral Presentations Oral Presentation	Lectures Self-Study Online Forums PBLs Research Assignment Individual/Team Projects
12,13	XML, DTD	4	Personal Website Peer reviews	Lectures Self-Study Online Forums PBL Individual Project
14	Team Project - Oral Presentations			

Schedule of Holidays, Make-up Sessions, Evaluations dates and Deadlines for Assignments.
USEK **Academic calendar** can be found at www.usek.edu.lb.

Week	Month	Date	Day	Specific Announcement
1	September	1	Monday	**Start of class** **Syllabus** **Lecture - Introduction to the WWW and the Internet** **Individual Project 1 announced (Website + Static HTML pages)**
	September	5	Friday	**Lecture - Introduction to the WWW and the Internet** **Individual Project 1 Q & A**
2	September	8	Monday	**No Class**
	September	12	Friday	
3	September	15	Monday	**HTML – Lecture / PBL** **Individual Project 1 Q & A**
	September	19	Friday	**HTML – Lecture / PBL** **Individual Project 1 Q & A**
4	September	22	Monday	**CSS – Lecture / PBL** **Individual Project 1 due date** **Individual Project 2 announced (Project 1 + CSS)**
	September	26	Friday	**CSS – Lecture / PBL** **Individual Project 2 Q & A**
5	September	29	Monday	**HTML – Lecture / PBL** **Individual Project 2 due date** **Individual Project 3 announced (Project 2 + Arabic Web pages / Menu / CV / Schedule)**
	October	3	Friday	**JavaScript – Lecture / PBL** **Individual Project 3 Q & A**
6	October	6	Monday	**JavaScript – Lecture / PBL** **Individual Project 3 Q & A**
	October	10	Friday	**HTML Forms – Lecture / PBL** **Individual Project 3 due date** **Individual Project 4 announced (Events, HTML Forms)**
7	October	13	Monday	**HTML Forms – Lecture / PBL** **Individual Project 4 Q & A**
	October	17	Friday	**JavaScript – Lecture / PBL** **Individual Project 4 Q & A**
8	October	20	Monday	**JavaScript – Lecture / PBL** **Individual Project 4 Q & A**
	October	24	Friday	**JavaScript – Lecture / PBL** **Individual Project 4 due date** **Individual Project 5 announced (Game)**
9	October	27	Monday	**JavaScript – Lecture / PBL** **Individual Project 5 Q & A**

	October	31	Friday	**PHP, MySQL – Lecture / PBL** **Team Project announced**
10	November	3	Monday	**PHP, MySQL – Lecture / PBL** **Individual Project 5 Q & A** **Team Project Q & A (with individual contribution log)**
	November	7	Friday	**PHP, MySQL – Lecture / PBL** **Individual Project 5 due date** **Team Project Q & A (with individual contribution log)**
11	November	10	Monday	**PHP, MySQL – Lecture / PBL** **Team Project Q & A (with individual contribution log)**
	November	14	Friday	**PHP, MySQL – Lecture / PBL** **Team Project Q & A (with individual contribution log)**
12	November	17	Monday	**JSON – Lecture / PBL** **Team Project Q & A (with individual contribution log)**
	November	21	Friday	**Web APIs – Lecture / PBL** **Team Project Q & A (with individual contribution log)**
13	November	24	Monday	**XML, DTD – Lecture / PBL** **In-class activity (XML+DTD)** **Team Project Q & A (with individual contribution log)**
	November	28	Friday	**XML, DTD – Lecture / PBL** **Team Project Q & A (with individual contribution log)**
14	December	1	Monday **1 extra session at 5 pm**	**Team Projects Presentations**
	December	5	Friday **1 extra session at 5 pm**	**Team Projects Presentations**

VIII. Course Material

Required Texts	Handouts
Supplemental References	MDN Web Docs : https://developer.mozilla.org/ W3Schools tutorials: https://www.w3schools.com/ Web.dev: https://web.dev/
Required Materials	Web development IDE **WampServer** (Windows) or **XAMPP/MAMP** (Win/macOS/Linux) Git + GitHub account

IX. Course Grading System

- **Active Participation (10%): Evaluation will consider students' preparedness for and active engagement in Project-Based Learning (PBL) sessions, as well as their active participation in course forums and Peer reviews.**
- **Individual Projects (50%): This category comprises 5 individual projects that emphasize the practical application of web programming skills. The assessment includes an oral presentation, enabling students to demonstrate their comprehension and communication abilities.**
- **Team Projects (40%): This category includes a team project where students collaborate to create web applications. The assessment also encompasses an oral presentation.**

All course grades will be regularly shared with students on the e-learning platform.
No test or examination shall be given during the last two weeks before the regular examination period.

Passing grade

A minimum grade of **70** is required for this course.
The Grading policy can be found in the **Academic Rules and Regulations** published on the website.

Grading criteria

Grading Criteria (Total = 100%)	
10%	**Active Participation**
50%	**5 Individual Projects: 10% per project**
40%	**Team Project** • **Project Proposal & Planning 5** • **Contribution Logs 5** • **Final Product 10** • **Oral Presentation and Demo 20**

X. Course Policies and Support to students

The USEK **Academic Rules and Regulations** is the official document of record concerning academic programs and regulations. It can be found at www.usek.edu.lb .

Class attendance policy

Students can, for valid and justified reasons, be absent for a number of teaching hours equal to three teaching weeks (20% of the course's number of hours, i.e., 9 hours = 6 sessions of an hour and 15 minutes each). However, they are responsible for learning material covered in class and will fail all graded class activities (quizzes, tests, presentations, discussions, etc.) organized during these absences.
Students who exceed the authorized limit of absences will not be allowed to sit for their final exam. They must officially withdraw from the course before the official deadline, otherwise, they will be given the grade FW (Fail to Withdraw).

Students with an excused absence will be permitted to make up coursework or complete an equivalent assignment agreed upon with the instructor.

Absence to Mid-term and final exam

A student who does not show up for the Mid-term and final exams, for any reason, is given, by the teacher, a failing grade of zero. If this absence is due to special justifiable circumstances, such as:

- Death of a family member or relative.
- Hospitalization, attested by a medical report from the hospital.
- Tested positive to COVID-19, attested by a PCR test with a QR code.
- Serious accident, attested by an official report from a sworn expert.

Then the student can present a petition with supporting documents at the Student Affairs Office within the 24 hours following the missed exam. The request will be accepted for a valid justification or in case of a recurrence. A student who has shown up for the exam cannot, in any case, present a petition for a make-up exam.
The Mid-term and final exams policy can be found at www.usek.edu.lb .

Late Submission

Assignments are expected to be submitted by the designated deadlines. Late submissions may result in grade penalties unless prior arrangements have been made with the instructor.

Academic Integrity

Plagiarism and any form of academic dishonesty are strictly prohibited. All work submitted must be your own, unless otherwise specified.
Students are expected to practice the highest possible standards of academic integrity. Any deviation from this expectation will result in an academic penalty of the student failing the assignment and may result in additional disciplinary measures. This includes, but not limited to, improper citation of sources, using another student's work, and any other form of academic misrepresentation. Suspicions of use of artificial intelligence aids will be considered as alleged violations of Cheating.
The Academic Integrity policy can be found at www.usek.edu.lb .

Use of AI Tools

You may use AI tools (e.g., ChatGPT, Copilot) **to support your learning outside class**, not to replace it.
Use AI as a personal tutor and checker: ask it to re-explain concepts in simpler words, to spot mistakes in your solutions, to generate extra practice questions, to suggest step-by-step hints (not final answers), and to quiz you orally until you can solve without help.
Always verify AI outputs against the textbook/notes and then redo problems without AI to confirm mastery.
For any take-home work, if you consult AI, you must include the link to the discussion in your submission (tool, purpose, prompt summary).

Netiquette

Students are expected to communicate with each other and with the instructor in a learning community. They are expected to be respectful, polite, and knowledgeable during oral and written communication and when posting to the class discussion forums.

Arrangements for Students with Special Needs

USEK empowers students to manage challenges and limitations imposed by special needs. Students with disabilities are encouraged to contact the Access Office by sending an email to accessoffice@usek.edu.lb, for any accommodation needed to fulfill course requirements (within the first week of the semester).

Writing Center

The USEK Writing Center offers writing assistance to students. Its main mission is to develop their writing skills and provide free writing support for students of all levels and at any stage of the writing process by offering in-person consultations during which writers can brainstorm ideas, adopt different writing approaches and strategies, and receive feedback from a well-trained tutor. For assistance student are encouraged to contact the center by sending an email to writingcenter@usek.edu.lb.

Technical Support

The Enterprise and Information Technology Services (EITS) at USEK provides essential assistance to students for resolving technical issues and ensuring smooth access to digital resources. It offers guidance and troubleshooting for hardware and software problems, assists with network connectivity, and helps students navigate learning management systems and online platforms.

Latest Update on	Signature
August 31, 2025	**P. Damien**