جامعة فيلادلفيا  Philadelphia University	اسم النموذج: خطة تدريس مادة دراسية Course Syllabus	QFO-AP-FI-002
	الجهة المصدرة: كلية تكنولوجيا المعلومات	رقم الاصدار :2 Revision 2
	الجهة المدققة: عمادة ضمان الجودة	التاريخ :2018/11/10
		عدد صفحات النموذج: 6

Department of Web Engineering
Second Semester, 2018/2019

Course Syllabus	
Course: Web Client Side Technologies	**Course code: 0780341**
Course Level: 3	**Course prerequisite(s) and/or co-requisite(s): 0780230**
Lecture Time: 10:10 – 11:00	**Credit hours: 3**

Academic Staff Specifics				
Name	**Rank**	**Office Location**	**Office Hours**	**E-mail Address**

Course module description:

This course is intended to give the student advanced issues in client-side computing. At the course completion, students will understand the client-side programming techniques and tools currently used in web programming today. They will have the know-how of designing and implementing client-side web-based applications. This course will discuss in details HTML5, CSS, JavaScript, and AJAX. It also focuses on the JavaScript libraries and frameworks and the responsive web design approaches. Language-independent data exchange formats for storing and transporting data will also be discussed in this course.

Course module objectives:

On successfully completing the module, the students are expected to have gained good knowledge of:

- Understanding general Client-Side Web Concepts
- Implementing client-side web-based applications.
- Controlling the layout and look of the web pages using CSS and responsive web design approaches.
- Embedding JavaScript code in HTML documents.
- Using JavaScript libraries and frameworks for web-based applications.

- Use language-independent data format that uses human-readable text to transmit data objects between web pages.
- Sending and retrieving data using AJAX techniques from a server asynchronously (in the background) without interfering with the display and behavior of the existing page

Course/ module components

- Textbook:
Roy, U. K. (2015). Web Technologies. Oxford University Press

- Support material (s)
The world's largest web development site: www.w3schools.com

Teaching methods:
Duration: 16 weeks, 52 hours in total
Lectures: 48 hours, 3 per week + three exams (Four hours)

Learning outcomes

A- Knowledge and understanding
- A1. Recognize general Client-Side Web Concepts
- A2. Explain the logic, syntax, and format of HTML tags.
- A3. Explain CSS and describe how it is working along with HTML.
- A4. Understand how web pages can be responsively designed with different screen sizes.
- A5. Describe advanced JavaScript instructions.
- A6. Outline and recognize different JavaScript libraries and frameworks.
- A7. Explain how data can be exchanged along different web platforms using well-known data exchange formats.
- A8. Understand and explain AJAX techniques.

B- *Intellectual Skills*
- B1. Design full web pages and connect between them.
- B2. Implement JavaScript code and embed it in HTML documents.
- B3. Construct responsive web pages to work with different screen size.

C- *Practical skills.*
- C1. Compare between different JavaScript libraries and frameworks.
- C2. Solve different cases which are requested by the user of the website.
- C3. Analyze programming problems and its corresponding problem-solving techniques.

D- *Transferable Skills.*
- D1. Work in a group to design and implements a full client-side website.
- D2. Present different code snippets for combining HTML, CSS, and JavaScript to the class.

Learning outcomes achievement
- Development:
  - A1, A2, A3, A4, A5, A6, A7, A8, B2, B3, and C1 are developed through the lectures, tutorials, and practical works.
  - B1, B2, B3, C3, and D1 are developed through Projects.
  - C2, C3, and D2 are developed through presentations.

- Assessment:
  - A1, A2, A3, A4, A5, A6, A7, A8, B2, B3, and C1 are assessed through written exams and practical works exams.
  - B1, B2, B3, C3, and D1 are assessed through projects.
  - C2, C3, and D2 are assessed through presentations.

Assessment instruments

- Website implementation project.
- Practical works
- Final examination: 40 marks

Allocation of Marks	
Assessment Instruments	**Marks**
First examination	**20**
Second examination	**20**
Final examination	**40**
Project	**20**
Total	**100**

** Make-up exams will be offered for valid reasons only with consent of the Dean. Make-up exams may be different from regular exams in content and format.*

Practical Submissions

The assignments/project that have work to be assessed will be given to the students in separate documents including the due date and appropriate reading material

Documentation and academic honesty

Submit your homework covered with a sheet containing your name, number, course title and number, and type and number of the home work (e.g. tutorial, assignment, and project).
Any completed homework must be sent to my mail box on the due date. After the deadline "zero" will be awarded. You must keep a duplicate copy of your work because it may be needed while the original is being marked.

You should hand in with your assignments:

1- A printed listing of your test programs (if any).
2- A brief report to explain your findings.
3- Your solution of questions.

For the research report, you are required to write a report similar to a research paper. It should include:

- **Abstract**: It describes the main synopsis of your paper.
- **Introduction**: It provides background information necessary to understand the research and getting readers interested in your subject. The introduction is where you put your problem in context and is likely where the bulk of your sources will appear.

- **Methods (Algorithms and Implementation)**: Describe your methods here. Summarize the algorithms generally, highlight features relevant to your project, and refer readers to your references for further details.
- **Results and Discussion (Benchmarking and Analysis)**: This section is the most important part of your paper. It is here that you demonstrate the work you have accomplished on this project and explain its significance. The quality of your analysis will impact your final grade more than any other component on the paper. You should therefore plan to spend the bulk of your project time not just gathering data, but determining what it ultimately means and deciding how best to showcase these findings.
- **Conclusion**: The conclusion should give your reader the points to "take home" from your paper. It should state clearly what your results demonstrate about the problem you were tackling in the paper. It should also generalize your findings, putting them into a useful context that can be built upon. All generalizations should be supported by your data, however; the discussion should prove these points, so that when the reader gets to the conclusion, the statements are logical and seem self-evident.
- **Bibliography:** Refer to any reference that you used in your assignment. Citations in the body of the paper should refer to a bibliography at the end of the paper.

- **Protection by Copyright**
  1. Coursework, laboratory exercises, reports, and essays submitted for assessment must be your own work, unless in the case of group projects a joint effort is expected and is indicated as such.
  2. Use of quotations or data from the work of others is entirely acceptable, and is often very valuable provided that the source of the quotation or data is given. Failure to provide a source or put quotation marks around material that is taken from elsewhere gives the appearance that the comments are ostensibly your own. When quoting word-for-word from the work of another person quotation marks or indenting (setting the quotation in from the margin) must be used and the source of the quoted material must be acknowledged.
  3. Sources of quotations used should be listed in full in a bibliography at the end of your piece of work.

- **Avoiding Plagiarism**.
  1. Unacknowledged direct copying from the work of another person, or the close paraphrasing of somebody else's work, is called plagiarism and is a serious offence, equated with cheating in examinations. This applies to copying both from other students' work and from published sources such as books, reports or journal articles.
  2. Paraphrasing, when the original statement is still identifiable and has no acknowledgement, is plagiarism. A close paraphrase of another person's work must have an acknowledgement to the source. It is not acceptable for you to put together unacknowledged passages from the same or from different sources linking these together with a few words or sentences of your own and changing a few words from the original text: this is regarded as over-dependence on other sources, which is a form of plagiarism.
  3. Direct quotations from an earlier piece of your own work, if not attributed, suggest that your work is original, when in fact it is not. The direct copying of one's own writings qualifies as plagiarism if the fact that the work has been or is to be presented elsewhere is not acknowledged.
  4. Plagiarism is a serious offence and will always result in imposition of a penalty. In deciding upon the penalty the Department will take into account factors such as the

year of study, the extent and proportion of the work that has been plagiarized, and the apparent intent of the student. The penalties that can be imposed range from a minimum of a zero mark for the work (without allowing resubmission) through caution to disciplinary measures (such as suspension or expulsion).

Course/module academic calendar

Week	Topic
1	• Introduction to the course
2	• HTML Advanced (1)
3	• HTML Advanced (2)
4	• CSS Advanced (1)
5	• CSS Advanced (2) • CSS libraries
6 **First Exam**	• Responsive design (1)
7	• Responsive design (2)
8 **Project First Submission**	• JS Advanced (1) • JS and HTML DOM
9	• JS Advanced (2)
10 **Second Exam**	• JS libraries and frameworks
11	• Data exchange formats (1) - XML
12	• Data exchange formats (2) - JSON
13	• AJAX (1)
14 **Project Final Submission** **Project Discussions**	• AJAX (2)
15 **How To - Presentations**	• How To – Examples
16 **Final Exam**	• Review

Expected workload:
On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:
Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a

mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Module references

Books

Students will be expected to give the same attention to these references as given to the module textbooks.

1. Sharma, P. (2013). Introduction to Web Technology. SK Kataria and Sons.
2. Peterson, C. (2014). Learning responsive web design: a beginner's guide. " O'Reilly Media, Inc.".

Websites

1. https://www.w3schools.com/html/
2. https://www.w3schools.com/css/
3. https://www.w3schools.com/bootstrap4/
4. https://www.w3schools.com/icons/
5. https://www.w3schools.com/graphics/
6. https://www.w3schools.com/js/
7. https://www.w3schools.com/jquery/
8. https://www.w3schools.com/angular/
9. https://www.w3schools.com/js/js_json_intro.asp
10. https://www.w3schools.com/js/js_ajax_intro.asp