



Web Application Design

(Conception d'Application Web)



Biography & Contact Adil CHEKATI, PhD

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The email should be **concrete** and clear. The subject of the e-mail must be specified.

I undertake to reply by email within 48 hours of receiving the message (except in the case of unforeseen circumstances).

Course information

- → Number of weeks: 14 weeks
- → Number of hours per semester: 42 hours
- → Credits: 5
- → Coefficient: 4
- → Weekly timetable:
 - ◆ Lecture 1h30
 - ♦ Hands-on workshop 1h30



Target audience

→ 1st year Master's students (M1)

→ Specialization: Information and Communication Sciences and Technologies - STIC



Objectives

- → Understand the core web technologies, including HTML, CSS, and JavaScript, and their roles in web development.
- → Apply advanced JavaScript concepts, including ES6 to design the frontend of an adaptive web application.
- → Comprehend the React framework in order to structure the front end of a single-page web application with ReactJS.
- → Implement React lifecycle methods and make informed decisions about component behavior and optimization.
- → Get-ready to the back-end development.



Prerequisites

- ☐ HTML, CSS & JavaScript skills
- □ DAW1 second-year course
- DAW2 L3-TI course



Course outlines

This course introduces the basic concepts needed to design fullstack web applications, with an emphasis on the front-end, concerned with presentation and user interface.

The course will introduce a JavaScript-based front-end framework from among: ReactJS, VueJS or AngularJS.

The hands-on workshops will put these concepts into practice.



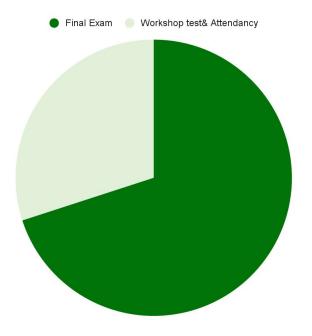
Course schedule

Chapter # weeks	
Chapter 1 - HTML- CSS - Javascript web technologies	(02)
Chapter2 - Advanced JavaScript concepts	(02)
Chapter3 - Introduction to the React framework	(01)
Chapter4 - Front end React development	(03)
Chapter5 - React lifecycle methods	(01 to 02)
Chapter6 - React router	(02 to 03)
Total	11 to 13

Workshop schedule

Worksops # weeks	
HTML, CSS, JavaScript review	(02)
Training on various web tools	(02)
Introduction to NodeJS and NPM	(01)
Develop with Create-React-App	(03)
Single-page application in React	(01 to 02)
Synthesis project	(02 to 03)
Total	11 to 13

Evaluation



The student's performance during the semester will be evaluated on the basis of **his or her results** in the various assessments (Exam, workshops tests).

Attendance and participation in hands-on sessions will also be taken into account.

Course policy

- → Continuous evaluation during hands-on workshops.
- → The final exam will be a synthesis test (covering all chapters of the course).
- → The mode of workshop test (written exam or practical) will be determined according to the progress of workshops.



Lab Exercises Submission Guidelines

→ Deadline:

At the end of each Lab session (no later than Saturday at 23:59) To: adil.chekati@univ-constantine2.dz

→ File's Name to be submitted:

CAW_Lab%_Gr%_NAMEPair1_NAMEPair2.zip Example: "CAW_Lab1.part1_Gr1_CHEKATI_BOUZENADA.zip"



Textbook

All academic materials will be available on:

Google Drive. E-learning platform of Constantine 2 University.





SCAN ME!

Questions, & comments...

adil.chekati@univ-constatine2.dz