

Web Programming (CS 406) Course Outline

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Objectives:

The course is focused on the fundamental concepts of web architecture and programming. It also provides insight into modern practices as far as web programming is concerned. The course is aimed towards beginners who have basic knowledge of programming but do not have any prior experience in web development. They will be taught basics of client and server-side programming and later introduced to modern practices such as Ajax and Web Services.

Prerequisites:

Computer Programming, Databases

Outline:

| Week | Topics | Lectures |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1 | Introduction and overview <ul style="list-style-type: none"> Components of the Web Architecture Web Technologies and Architecture Overview | 2 |
| 2 – 4 | Client-side Programming <ul style="list-style-type: none"> HTML CSS Javascript language and frameworks Cross browser compatibility Responsive UI design | 6 |
| 5 – 8 | Server-side Programming <ul style="list-style-type: none"> Introduction to web servers Request/Response cycle Building Web Application | 8 |
| 9 – 12 | Advanced Web Technologies <ul style="list-style-type: none"> Adding a dynamic front-end with AngularJS Managing authentication and user sessions XML AJAX Search Technologies | 8 |
| 13 – 14 | Building a Single Page Application <ul style="list-style-type: none"> SPA using AngularJS | 3 |
| 14 | Final Project Evaluation | 1 |

Assessment

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| Assignments | 10 % |
| Quizzes | 10 % |
| Mid Term | 25 % |
| Project | 15 % |
| Final | 40 % |
| Total | 100 |