158.258 Web Development

Course Introduction and Useful Information

Computer Science & Information Technology
School of Mathematical & Computational Sciences
Massey University
(AKLI, DISD, MTUI & TSNI)

Revised: 2022-07-07

Outline

Course Introduction	Course Outline
1. Course Instructor(s) 2. Timetable 3. Personal Time Budget 4. Online Classroom 5. Course Materials 6. Course Policies Procedures	1. Aim of Course 2. Learning Outcomes 3. Assessments 4. Course Content

Course Instructors from School of Mathematical & Computational Sciences (SMCS)

- **Instructor:** *Dr Stephen Lean*
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Teaching and Learning in 158.258

- Practical course with very little theory.
- Lectures will adopt a practical approach using example code in HTML, CSS, JavaScript, C# and other Web development languages.
- Students will be required to solve weekly practical challenges that require writing code in the Web languages.

Personal Time Budget

This is a suggested personal time budget but this depends on your background and other personal circumstances.

Activity	Time Provision (Hours)
Lectures	24
Personal Study	52
Assignments	26
Lab & Tutorials	24
Exam Preparation	24
TOTAL	150

Course Materials

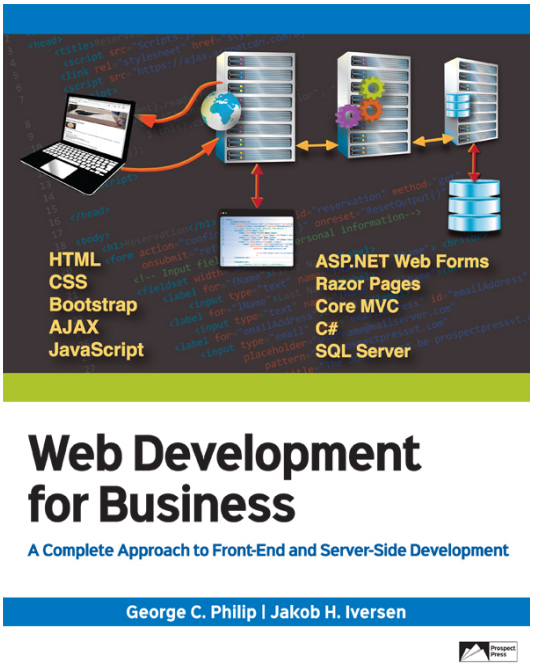
Course materials on Stream:

1. Topic slides and accompanying video or audio recordings
2. Tutorial challenges
3. Any other extra materials where instructors find necessary to provide them

Regularly visit the course's Stream site.

Highly Recommended Reading for Part 1 and 2

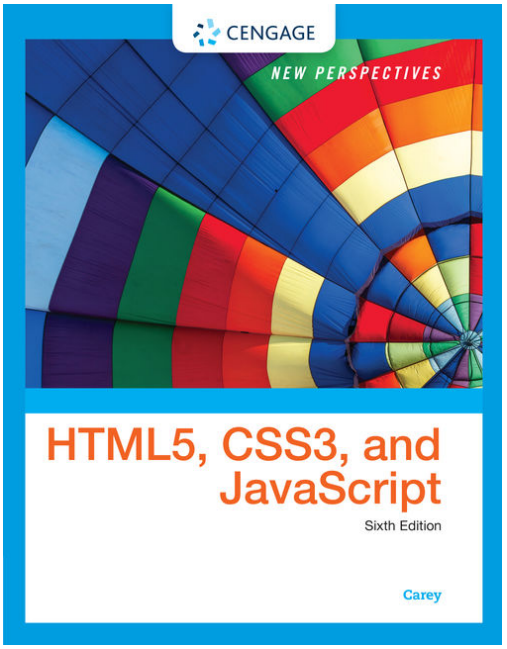
- **Note:** There is no prescribed textbook for this course. However, those that would like to purchase book should look at our highly recommended book list.



- One book that covers most topics in the course.
- The book, *"Web Development for Business"* presents both *front-end* and *back-end* technologies as well as database interactions (see cover illustration).
- This comprehensive book covers HTML, CSS, Bootstrap, AJAX, JavaScript, ASP.NET Web Forms, Razor Pages, Core MVC, some C# and SQL most of which are covered in this course.
- Book specification:
  - *George C. Philip and Jakob H. Iversen (2022). Web Development for Business: A Complete Approach to Front-End and Server-Side Development. Prospect Press. ISBN: 978-1-943153-89-3. URL: Publisher Link*

Highly Recommended Reading for Part I

Highly recommended book for Part I only and covers in detail:



- HTML5
- CSS3
- JavaScript

Book specification:

- Patrick Carey (2017), *New Perspectives on HTML5, CSS3, and JavaScript*, 6th Edition, **Cengage Learning**, ISBN-13: *978-1305503922*

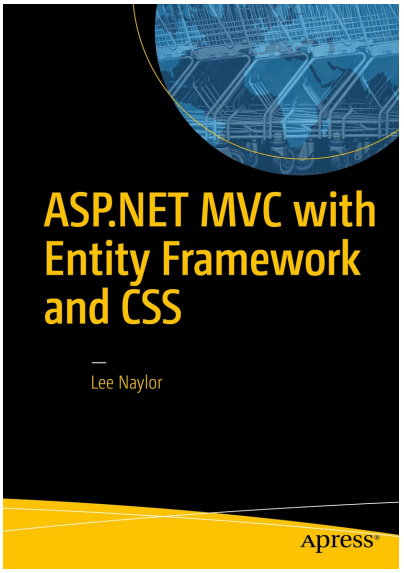
Availability:

- Go to CENGAGE, New Zealand
- Massey student student discount code for 2022 semester 2 is **WOW10**

This is one of the most enjoyable book on the three key Web technologies (HTML, CSS, JavaScript) that takes a hands-on practical approach and allows learning to code well-designed Web pages from the beginning.

Highly Recommended Reading for Part 2

- Lee Naylor (2016). *ASP.NET MVC with entity framework and CSS*, APress. ISBN: 978-1-4842-2137-2. DOI: 10.1007/978-1-4842-2137-2. (Massey Library Link)



- This book is freely available to all Massey University students through the University Library.
- In the book, it is stated that you should download Visual Studio 2015 Community Edition. You can, however, download the latest version.
- The book also requires: ASP.NET, MICROSOFT, Free, Cross-platform, Open source
- Although this is not a prescribed textbook, it is highly recommended reading for Part 2 of the course.

Course Aim

- To introduce the basics of Webpage, Website and Web application development.

General Objectives

1. Build on 100 level information technology and/or computer science courses.
2. Help you to develop corre basic skills for developing Websites and Web-based applications.
3. Support further study in other papers related to Web and software design and development at 200 and 300 levels.

Learning Objectives/Outcomes (LO)

- *At the end of the course, you should be able to:*

    1. *Discuss appropriate analysis and design methods for web-based systems including basic principles of responsive design, accessibility and user-interface design.*
    2. *Contrast the technology layers of web applications and select appropriate technologies for implementing web-based solutions.*
    3. *Create web sites containing textual and multimedia content as well as various forms of structured and semi structured data to enhance the user-experience.*
    4. *Use appropriate client- and server-side technologies for design and implementation of web-based applications.*

- NB: Learning outcomes can change before the start of the semester you are studying the course in.
- These learning outcome may also be viewed here.

For any questions …

- Direct questions to:
  - *Stream Forums*
  - *Course coordinator*