

1. Course Profile

1.1 Course Summary

Course ID:	Course Title:	Credit Hours:	Year: 3 st Term: 1st
CSE 3100	Web Programming	1.5	

1.2 Rationale

This course involves an overview of Internet communications and information services as well as technologies on which the Internet and the Web are built. It focuses on Web design, development, and scripting and learning the latest tools and techniques for building professional, dynamic, and interactive web pages and sites.

1.3 Course Content

Internet communication protocols such as TCP/IP, FTP, SMTP and HTTP, Basic networking concepts, Advanced Web page development with dynamic HTML, JavaScript, AJAX, jQuery and Cascading Style Sheets, Server-side development technologies such as Perl, PHP, Laravel-PHP Framework, ASP.net, MVC Framework, Java Servlets, JSP and JSP.net, Basic SQL for database interaction.

1.4 CLO to PLO mapping

Course Learning Outcome (CLO) Matrix							
CLOs	CLO Description	Bloom's Learning Levels				PLO Assessed	CLO-PLO Correlation
		C	A	P	S		
CLO1	Explain modern communication protocols and systems used on the Web.	2				PLO1	3
CLO2	Demonstrate the functions of clients and servers on the Web, and describe the strengths and weaknesses of the client-server internet.	3	3			PLO1, PLO2	2, 3
CLO3	State, access, and manipulate data through the adoption of accepted standards, mark-up languages, client and server-side programming.	4		2		PLO3, PLO5	3, 3
CLO4	Construct a client-server internet application that accommodates specific requirements based on analysis and modelling.	6		4		PLO4, PLO11	3, 2

1.5 Lesson Planning with Mapping of CLO, Teaching and Assessment Strategies

	Week	Topic	Teaching-Learning Strategy	Assessment Strategy	Corresponding CLOs
C S E 3 1 0 0 (L	1	Environment Setup, Internet Communication Protocols, HTML Basics	Lab (2.5h) x 13 weeks	Viva-Voce conducted in Lab Class, Regular Lab Work	CLO1, CLO2, CLO3, CLO4
	2	CSS and JavaScript Basics			
	3	Project Presentation (Front-end)			
	4	Basic PHP and C# (ASP.NET)			
	5	PHP and ASP.NET Environment Setup, IDE, Server Setup, PHP/ASP.NET Basics			
	6	MVC Design Pattern			

a b o r a t o r y)	7	Header, Session, Cookie, Client-side Validation			
	8	Database Connections and Queries			
	9	Web Service, API			
	10	XML, JSON			
	11	Web Deployment			
	12	Final Project Presentation			
	13	Final Evaluation			Final Lab Test, and Quiz, etc.

1.6 References

- Chris Aquino & Todd Gande, "Front-End Web Development: The Big Nerd Ranch Guide".
- <https://www.w3schools.com/>
- <https://www.tutorialspoint.com/>
- <https://laravel.com/>
- <https://learn.microsoft.com/aspnet/core/>
- Lecture slides and notes available during class lecture.

1.7 Tools

- Visual Studio Code
- Visual Studio
- XAMPP
- Microsoft SQL Server Management Studio

1.8 Assessment and Evaluation

	Assessment Type	Assessment Tools	Allotted Marks	Assessment No	CLO Assessed	Blooms Category	Sub Total
CSE 3100 (Laboratory)	Continuous Assessment	Class participation, Attendance	10%		CLO1, CLO2, CLO3, CLO4	Understand, Apply, Analyze, Create	20%
		Quizzes, Viva-Voce conducted in Lab Class, Regular Lab Work	10%				
	Summative Assessment	Final Project	40%				80%
		Viva-Voce Conducted Centrally	10%				
		Performance (Final Lab Test, and Quiz, etc.), Report	30%				
	Total						