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| **CS 1810** | **Web Development I** | Pre-requisites |
| Yr3 - Fall | CS 1410 |

The course provides a technical overview of the Internet environment and the structure of the World Wide Web. The technical segment will focus on the design and implementation of an effective web site at the introductory level.

**Learning Outcomes**

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| Students will be able to build a simple web site that organizes information effectively | Students will be able to identify an organization for information based on its inherent structure (chronological, alphabetic, etc.). | Students will be able to use cascading style sheets to create style standards for a web site. |
| Students will be able to create a navigational framework that matches the content and genre of the site. | Students will be able to explain separation of concerns as it applies to the design and implementation of a web site | Students will be able to describe the issues involved in developing a web interface. |
| Students will be able to summarize the need and issues involved in web site implementation and integration. | Students will be able to explain why accessibility issues are an important consideration in web page development. | Students will be able to design and implement a web interface |
| Students will be able to compare/contrast graphic media file format characteristics such as color depth, compression and CODEC | Students will be able to explain and compare media file formats including lossy vs. lossless compression, color palettes, streaming formats, and CODECs | Students will be able to explain and compare the inter-operability of formats |

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| **CS 1820** | **Web Development II** | Pre-requisites |
| Yr3 - Spring | CS 1810 |

CS 1820 introduces the principles of back end web development. The backend of a web application is an enabler for a front end experience. Backend developers need to understand programming languages and database and they must have an understanding of server architecture.

**Learning Outcomes**

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| Demonstrate how server-side technology works. | Develop with server-side technology. Complicated web development environments such as ASP.NET and PHP have a fairly substantial learning curve. | Utilize databases in web applications. |
| Implement common data models used in blogs, forums, and content management systems. | Design software for web applications. This includes layered software architectures as well as tiered designs for scalability and reliability. | Identify mechanisms for maintaining state in web applications. This is one of the most important topics in the course since it is the principal difference between web application development and non-web application development. |
| Consume REST and SOAP web services. | Design and implementing web security. |  |
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