

**Nelson Mandela High School**

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**Web Design**

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| Period 2 | Mr. Hackenbrook | Room 1226 | dyhackenbrook@cbe.ab.ca |

**Course Description:**

Students in Web Design can expect to learn programming concepts including:

* analysis of webpage data to determine appropriate data structures
* writing HTML and CSS code to create complete static web pages
* optimizing and styling images for the web

Throughout the course students will practice time management and goal-setting techniques, learn about and respect intellectual property rights, and participate in multiple revisions of their work to ensure quality.

**Course Objectives and Assessment:**

As this is a Career and Technology Studies(CTS) course, all curricular outcomes will be drawn from the [Alberta CTS Program(s) of Studies](https://education.alberta.ca/career-and-technology-studies/programs-of-study/)

**Competencies – 30%**

In CTS at Nelson Mandela the following competencies will be assessed:

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| **Competency** | **Descriptor** |
| Information Management | * Students demonstrate this competency when they identify and clarify clear criteria for problems, explore a variety of problem solving techniques, and then select and defend the most viable option. |
| Personal Management | * Students demonstrate this competency when they take personal responsibility for their habits and wellbeing. This includes career skills like punctuality and professionalism as well as striving for personal excellence. |
| Communication and Collaboration | * Students demonstrate this competency when they communicate clearly and effectively with a wide variety of audiences and peers. It also includes the effective use of communication technologies and the application of strategies to be an effective collaborator in a group. |
| Innovation and Creativity | * Students demonstrate this competency when they take risks when exploring a variety of creative processes. They also adapt and persevere when exploring ways to create value and achieve excellence. |
| Complex Problem Solving | * Students demonstrate this competency when they draw on multiple perspectives, disciplines and resources to select the most viable solution. They also approach all problems with optimism and hope. |

**Outcomes – 70%**

Students taking Web Design Introduction will be working towards the following set of credits.

These are the credits that may be offered in the course and they may change due to duplicate CTS credits in other courses and/or missing prerequisites.

**Introductory Credits (Web Design 10) | Intermediate Credits (Web Design 20)**

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| **Credit** | **Outcome** |
| **COM1005:**  **Visual Composition** | Students learn to employ fundamental elements and principles of design for various media and gain a strong foundational multidisciplinary experience in preparation for other Communication Technology courses. |
| **COM1025:**  **Typography** | Students will learn about the typography and its uses in today’s world. |
| **COM1055:**  **Web Design 1** | Students research the characteristics of effective Web page(s) and learn World Wide Web Consortium (W3C) conventions and accessibility concerns to construct a simple Web page. |
| **COM2055**  **Web Design 2** | Students learn intermediate coding and software applications to produce a Web site. |
| **COM2285:**  **Com Tech Client Services 1** | Students are introduced to the principles and practices of client services. |
| **CSE1210:**  **Client-Side Scripting 1** | Students are introduced to Internet computing through the use of one or more Web-specific markup languages. As part of this process, students learn how the Web uses markup languages to provide a client-side approach to display static information. Students also learn how to analyze, modify, write and debug algorithms and documents that use a markup language. |
| **CSE1220:**  **Client-Side Scripting 2** | Students deepen their understanding of Internet computing by using more advanced markup language techniques and by being introduced to one or more Web-specific scripting languages. As part of this process, students learn how the Web uses these resources as a means of displaying dynamic client-side information. Students learn how to analyze, modify, write and debug algorithms and scripts that use structured programming approaches. |
| **COM2920:**  **COM Project C** | Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant. |

**Course Materials and Resources:**

Students are expected use Google Drive to take electronic work home when needed.

There are several free software applications that student can use to code HTML and CSS. These could include: atom, brackets, visual studio code, and notepad++

Students will need to regularly check the course website <https://mandelawebdesign.com/> and D2L for lessons and assignments.