

Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <u>https://catalog.uvu.edu/</u>

Semester: Spring	Year: 2025
Course Prefix: DWDD 1720	Course and Section #: X01
Course Title: Scripting for Internet Technologies	Credits: 3

Course Description

Introduces the fundamentals of computer programming and problem solving using the current industry standard scripting languages. Emphasizes the fundamentals of structured and object-oriented programming, syntax, semantics, control structures, arrays, file I/O, testing/debugging, implementation, and the construction of graphical user interfaces. Applies these concepts to manipulate digital images, sound, movies, text, and web pages that are heavily used as digital media.

Course Attributes

This course has the following attributes:

- □ General Education Requirements
- Global/Intercultural Graduation Requirements
- □ Writing Enriched Graduation Requirements
- ⊠ Discipline Core Requirements in Program
- □ Elective Core Requirements in Program
- \Box Open Elective

Other: Click here to enter text.

Instructor Information

Instructor Name: Thor Anderson

Student Learning Outcomes

At the end of this course, students should be able to:

- Identify the syntax and semantics of procedural programming: assignment, sequential operations, iteration, conditionals, functions and arrays
- Use object-oriented design to build a simple program
- Implement proper design, debugging and testing for simple programs
- Explain data structures, algorithms, and program efficiency
- Explain how digital media is represented and manipulated

Course Materials and Texts

Textbooks There are no required books for this class Software You will need the following software if you are using a Macintosh computer.

• Download your free copy of <u>Visual Studio Code</u> for Macintosh. It color codes your documents. You will need the following software if you are using a Windows computer.

• Download your free copy of <u>Visual Studio Code</u> for Windows. It color codes your documents. Web Hosting

You will create a free account on GitHub and Netlify to host and publish your assignments.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Units 1 through 12

You may complete these assignments at your own speed as long as you are done with all of then prior to the end of the semester (Reading Day).

If you want to complete this course in 6 weeks, you may. If you want to take the full 15 weeks, you may. While the time you take to achieve competency will vary, you must pass each assignment at 90% in order to pass the class. By passing the first 12 units in the course, you will receive a final grade of a "B". Failing to complete all 12 units will result is a final grade of "F"

Optional Capstone Activities

If you want to improve your grade above a "B", there will be several activities that you can complete. Your level of achievement these optional assignments will determine whether you receive a B+, A-, or A. for the class. If you want to complete the optional capstone assignments, they will be due by Thursday night of finals week.

Grading Your Work

Assignments will be graded within a couple of days of being submitted in Canvas (excluding weekends). If your assignment does not meet the minimum criteria, you will be given detailed comments about what you need to correct and receive a temporary score of "0" for the assignment. Once you have redone your assignment, you must resubmit your assignment in Canvas so it can be regraded. This process will occur over and over until you complete the assignment at 90%.

Required or Recommended Reading Assignments

All required assignment readings are public web pages.

General Description of the Subject Matter of Each Lecture or Discussion

This course will rely heavily on screen casts (videos showing a computer screen and narrated by Dr. Cheney) to communicate the material we cover in class. These videos provide the optimal opportunity for you to control when and where you study. You can also pause the video while you get a snack or try to make your code work like the example. Have you ever been able to do that during a philosophy or history lecture? Most of the lessons will have video tutorials that show you how to complete an activity that is similar to the one you will work on. We hope you enjoy the benefits of mobile learning! Links to these videos are in each Canvas module on a page titled "Instructional Videos"

Required Course Syllabus Statements

Generative AI

In this course, we immerse ourselves in the rapidly evolving world of web development, and an exciting aspect of our journey involves leveraging the cutting-edge capabilities of AI tools such as GitHub Copilot, ChatGPT and our course specific DWDD 1720 ChatBot. These resources are introduced as

learning assistants designed to enhance your understanding and expedite your mastery of web development concepts.

However, it's crucial to understand the intended role of AI in your educational experience. You are encouraged to utilize AI as a supplementary aid that streamlines research, sparks ideas, and refines coding skills. Yet, it is imperative that any AI-generated content not replace the fundamental learning process. AI should serve as a springboard for your creativity and analytical thinking, not as a substitute for these essential skills.

To maintain academic integrity and promote a genuine learning environment, adhere to the following directives:

- 1. Accountability. As a developer, you are ultimately responsible for ensuring that any code, whether it originates from your own efforts or AI assistance, performs its intended function and accurately reflects your own understanding and intention. Actively verify that any generated code meets the assignment's requirements and adheres to best practices.
- 2. Critical Engagement. Do not accept AI-generated content uncritically. Always review and understand the output thoroughly. This critical engagement ensures that you grasp the underlying principles and can confidently explain and justify the work presented as your own.
- 3. Skill Development. The ability to adeptly employ AI tools is quickly becoming an expectation in the tech industry. We aim to equip you with this vital competency. Nevertheless, remember that AI assistance is merely one aspect of your development as a proficient web developer. True mastery comes from persistent practice and diligent study.
- 4. The Pursuit of Excellence. While AI may accelerate your learning process, it's no replacement for the hard work and dedication necessary to achieve excellence in web development. Embrace the technologies that can aid your progress, but never lose sight of the commitment required to excel in your field.

By following these guidelines, you ensure that your interaction with AI tools like ChatGPT enriches your education and prepares you for a successful career in web development. Let us use AI to propel us toward deeper understanding and more complex challenges, transforming our class time into an engaging exploration of what lies at the forefront of technology.

Using Remote Testing Software

 \boxtimes This course does not use remote testing software.

□ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancyrelated conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747. Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at <u>DHHservices@uvu.edu</u>

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: *Student*</u> <u>*Code of Conduct*</u>.

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <u>accessibilityservices@uvu.edu</u>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed

by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.