

# Course: ICT 420-201

## Title: Semantic Web Development

Term: Spring 2023  
Credit hours: 3  
Meeting days/time/location: Online

### Instructor Information

Name: Dr. Christopher Sean Burns  
Email: sean.burns@uky.edu  
Office building and room number: 327 Little Library Building  
Office phone: (859)-218-2296  
Office hours: Tue/Thu: 9-11am  
Preferred Method of Communication: Email or Element.  
I usually respond to emails within 24 hours or the first business day after the weekend or holiday; I do not respond to emails in the evenings or on the weekends. We will use Zoom or Teams to have one on one meetings/office hours.

### Course Description

This course introduces students to web development with the goal of designing a website containing structured and semantic data and that adheres to principles of usability, accessibility, and inclusion. By the end of this course, students will acquire skills at planning, developing, organizing, and managing websites in HTML5 and CSS3 and will develop an understanding of basic design principles and project management. Prereq: ICT 320 Information Architecture or instructor approval.

### Course Prerequisites

ICT 320 Information Architecture. Major standing in ICT or permission of the instructor.

### Required Materials

Computer and the ability and authorization to install software.

### Skill and Technology Requirements

Minimum technical requirements for UK courses and suggested hardware, software, and internet connections are available at [ITS Student Hardware & Software Guidelines](#).

Other software required:

- Text editor (not a word processor). Suggested: VS Code, <https://code.visualstudio.com/>
- Vector graphics editor. Suggested: Inkscape, <https://inkscape.org/en/>.
- Git. Required: <https://git-scm.com/downloads/>. Revision control system.

*For technical/account help not related to the course, students can contact Information Technology Services by phone 859-218-HELP (4357) and via the [ITS Customer Services](https://www.uky.edu/its/customer-support-student-it-enablement/customer-services) page. (<https://www.uky.edu/its/customer-support-student-it-enablement/customer-services>)*

## Student Learning Outcomes

After completing this course, students will be able to:

- explain and implement standard design principles that account for accessibility, usability, and inclusion for audiences of different types;
- understand basic project management and organize work flows;
- read and write HTML5 and CSS3 code;
- connect to a web server and upload, organize, and manage project files; and
- *understand and implement structured and semantic data in web sites.*

## Course Details

### Tentative Course Schedule

Discussions (25% of final grade) are due weekly and are listed in our Canvas shell. Element messaging will be used for general discussion and discussing challenges.

Major assignments (75% of final grade) and due dates include:

**Assignment 1: Informal chat on Element, due weekly**

**Assignment 2: Peer review via GitHub, due after assignments 4, 5, 6, 7**

**Assignment 3: Site Mockup, due 2/1**

**Assignment 4: Single Page Website Build, due 2/22**

**Assignment 5: Two Page Website Build, due 3/22**

**Assignment 6: Three Page Website Build, due 4/55**

**Assignment 7: Accessibility Review, due 4/26**

### Course Activities and Exams

This course is taught as an online course. Each week, students will view lectures, review transcripts on website development, and complete tasks. It is expected that students will devote a considerable amount of time to study the materials. Online discussions will be devoted to troubleshooting and completing weekly tasks.

All assignments, including discussion posts, are graded as completed (100 points) or incomplete (0 points). If an assignment is submitted and requires additional work, it will be marked as incomplete and the student will have one week to resubmit for a complete. The final grade is calculated based on the proportion of completed work out of total work and weighted per assignment type. Due date extensions are negotiable upon request.

The grading process described above pertains to all three assignment types. These include discussion assignments, major assignments, and the final project. However, since the final project is due near the last day of classes, the project must be submitted on time. Discussion assignments account for 10% of the final grade; major assignments account for 75% of the final grade; and the final project accounts for 15% of the final grade.

### Grading Scale

90 - 100% = A

80 - 89% = B

70 - 79% = C

60 - 69% = D

Below 60% = E

### **Midterm Grades**

For undergraduates, midterm grades will be posted in myUK by the deadline established by the University Senate and published in the [Academic Calendar](http://www.uky.edu/registrar/content/academic-calendar). (<http://www.uky.edu/registrar/content/academic-calendar>)

### **Attendance Policy/Acceptable Documentation**

Since this course is taught as an online class, students are expected to manage their time and keep up with coursework.

### **Assignment Policies**

#### **Assignment Submissions**

Students will submit assignments via Canvas or via appointment on Zoom depending on the assignment description and software requirements.

#### **Late Assignments**

Late assignments are accepted. Students must reach out to the instructor within one week after the due date to discuss submission times. Until submitted, all work will be marked as incomplete. No work will be accepted after the last day of classes, which is 4/26.

#### **Assignments Due during Prep Week**

The Accessibility Report is due on April 26, which is during Prep Week.

### **Academic Policy Statements**

Please review the Senate's [Academic Policy Statements](#).

### **Academic Offenses (Cheating, Plagiarism, and Falsification or Misuse of Academic Records)**

Please review the [Rules Regarding Academic Offenses](#).

### **Resources**

Please see UK's [Distance Learning Library Services](#), [Tutoring and Coaching Resources](#), proctoring information, etc.

### **Diversity, Equity, and Inclusion**

This course and instructor honor the University's statement on diversity, equity, and inclusion. To read this statement, see [Syllabus Statement on Diversity, Equity, and Inclusion \(DEI\)](#).

### **Other Student Resources**

The University offers a variety of resources to students. Visit the University Senate's [Resources Available to Students](#).