



Syllabus

SCHOOL OF TECHNOLOGY AND COMPUTING **IS 331: Understanding Technology for Communication**

5 Credits
Effective: Winter 2012

*Access to the Internet is required.
All written assignments must be in Microsoft-Word-compatible formats.
See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.*

FACULTY

Faculty Name: FACULTY NAME

Contact Information: CONTACT INFORMATION

[INSTRUCTOR MAY INSERT PERSONAL MESSAGE IF DESIRED]

COURSE DESCRIPTION

This course covers the technology behind social media and digital communications, including such topics as html, css, javascript, XML, widgets, metadata, and platforms. Students in this course will understand the behind-the-scenes functioning of social networking, mobile devices, and social media. This will give them a greater appreciation of the capabilities and limitations of the technologies as they apply them to communication strategies.

COURSE RESOURCES

Required and recommended resources to complete coursework and assignments are listed on the My.CityU portal at [Library>Resources by Course](#).

CITYU LEARNING GOALS

This course supports the following City University learning goals:

- Professional competency and professional identity

COURSE OUTCOMES

In this course, learners:

- Examine how the Internet operates, is managed, and enables communications.
- Discover the technologies that enable the separation of data, processing, communication, and display to create effective applications.
- Give examples of technologies that enable devices and the principles of how they work.

CORE CONCEPTS, KNOWLEDGE, AND SKILLS

- Compare different standards creation and maintenance processes.
- Compare the tools available on common platforms for creating Apps.
- Create an application for a mobile device using a visual tool.
- Create an example App on a platform.
- Demonstrate how Javascript is used to validate form data and perform other tasks.
- Demonstrate how PHP can be used to retrieve data from a database.
- Demonstrate how to use metrics software.
- Describe common available metrics packages.
- Describe how 1-many and many-to-many relations are represented in a database.
- Describe how SMTP and MIME are used to exchange multi-media emails.
- Discover how sensors are used in mobile and game devices.

- Discover the broad variety of widgets available for mash-ups.
- Discover the capabilities of web design tools.
- Discover the information which is available to an application.
- Discover the Layer model of networking.
- Discuss how API's, XML and feeds can be used to support mash-ups
- Discuss how Application Programming Interfaces (API's) are used to enable Apps.
- Discuss what tools and techniques can be used to increase effectiveness.
- Established how forms can be used to make pages interactive.
- Explore standards and standards bodies.
- Implement a web page using CSS for design elements.
- Investigate the origin and output of GPS and location data.
- Obtain a working knowledge of HTML.
- Outline the capabilities and limitations of SMS and Mobile Messaging
- Outline the infrastructure of an email system.
- Outline the measurements that can be used to determine web site effectiveness.
- Relate how a database stores, organizes and accesses data.
- Relate how different communications technologies can be integrated using Internet Protocols (IP).
- Review the role of XML in transmitting data.
- Show how PHP is used for server-side processing.
- Trace the processes used to store, access and display a web page.
- Understand how IP addressing works, and how DNS makes it magic.
- Understand the difference and uses of client- and server-side processing.
- Understand the key programming elements of process, decision and iteration.

OVERVIEW OF COURSE GRADING

The grades earned for the course will be derived using City University of Seattle's decimal grading system, based on the following:

<i>Overview of Required Assignments</i>	<i>% of Final Grade</i>
Internet Application Study	15%
Student Web Site	10%
Data-driven Web Exercise	15%
Website Assessment	15%
Create a web mashup	15%
Create Mobile App	10%
Instructor Determined Assignments and Discussions	20%
TOTAL	100%

SPECIFICS OF COURSE ASSIGNMENTS

The instructor will provide grading rubrics that will provide more detail as to how this assignment will be graded.

Internet Application Study

The student will perform a study of an Internet-based application and will write a paper on the application. The application will be from a list provided by the instructor, or may be another application which the instructor has specifically approved.

The paper will include a description of the application and provide specific details about the application based on the student's research.

The paper will discuss the protocols used in the application, and the types of systems and devices the application can be used on. The paper will provide details about specific technologies the application depends on, or uses to provide enhanced capabilities.

The paper will be a maximum of 10 pages in length.

<i>Components</i>	<i>% of Grade</i>
Internet Understanding	30%
Writing Mechanics	30%
Analysis	40%
TOTAL	100%

Student Web Site

Each student will build a personal web site.

The web site must include:

- at least 3 pages.
- at least 5 graphical elements.
- a standard means of navigating within the web site.
- at least 4 external links.

The web site can be based on any appropriate non-controversial topic the student chooses.

The web site should be designed to conform to basic esthetic and design principles.

The student can use any web site editing platform desired. However, they must work in conjunction with the provided web server account.

The instructor may add additional specific requirements.

The student is encouraged to exceed the requirements.

The instructor will provide an account and instructions for uploading to the account on a City University webserver.

<i>Components</i>	<i>% of Grade</i>
Requirements	40%
Web Design Principles	60%
TOTAL	100%

Data-driven Web Exercise

Students will complete a guided exercise provided by the instructor to construct a data-driven web site.

<i>Components</i>	<i>% of Grade</i>
Requirements	100%
TOTAL	100%

Website Assessment

Students will use analytics tools to evaluate the performance of a web page. The instructor will provide information about the tools and the log files for the pages to be evaluated.

Based on their evaluations, the students will make observations about the page and recommendations for changes to the page to improve performance.

<i>Components</i>	<i>% of Grade</i>
Writing Mechanics	20%
Requirements	20%
Recommendations	30%
Website Comparison and Evaluation	30%
TOTAL	100%

Create a web mashup

Students will follow directions provided by the instructors to create a web page or application which uses mash-ups to provide services to the user.

<i>Components</i>	<i>% of Grade</i>
Requirements	100%
TOTAL	100%

Create Mobile App

Students will use a programming-less environment to create a mobile app. The instructor will provide detailed directions.

<i>Components</i>	<i>% of Grade</i>
Requirements	60%
Technology	40%
TOTAL	100%

Instructor Determined Assignments and Discussions

The instructor will evaluate participation in the course and in discussions. The instructor may also include other assignments. The instructor-determined assignments and discussions will be distributed and evaluated such that the total point value reflects the weighting given in the rubrics. The instructor will provide the grading criteria, rubrics, and directions for completing these assignments.

<i>Components</i>	<i>% of Grade</i>
Adds insightful or new ideas, comments, or questions relevant to the activity and/or to other students' posts	25%
Appropriately references readings, material in course sessions and other postings	25%
Meets requirements of the activity in a timely manner	25%
Writes clearly, concisely, and grammatically	25%
TOTAL	100%

COURSE POLICIES

Late Assignments

LATE ASSIGNMENT

Participation

PARTICIPATION

Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

UNIVERSITY POLICIES

You are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the [University Catalog](#) that is linked from the CityU Web site.

Scholastic Honesty

Scholastic honesty in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. You are responsible for understanding CityU's policy on scholastic honesty and adhering to its standards in meeting all course requirements. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Scholastic Honesty* under *Student Rights & Responsibilities*.

Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if s/he is present at any time during the class session. For online classes, a student has attended if s/he has posted or submitted an assignment. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Attendance Policy for Mixed Mode, Online and Correspondence Courses*.

SUPPORT SERVICES

Disability Resources

If you are a student with a disability and you require an accommodation, please contact the Disability Resource Office as soon as possible. For additional information, please see the section in the [University Catalog](#) titled *Students with Special Needs* under *Student Rights & Responsibilities*.

Library Services

CityU librarians are available to help you find the resources and information you need to succeed in this course. Contact a CityU librarian through the [Ask a Librarian](#) service, or access [library resources and services online](#), 24 hours a day, seven days a week.

Smarthinking

As a CityU student, you have access to 10 free hours of online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at help@cityu.edu to request your user name and password.