Business & Technology Department

Hint: click "Course Title" to access the subject's syllabus

Course Title: Accounting

Department: Business (subset of Social Studies)

Semesters: 2

Course Prerequisites: Junior/Senior status

Required Textbooks:
General Journal, Century 21 Accounting, 9E and Working Papers Chapters 1-16

Course Goals/Objectives:

- Introduce Accounting, the language of business.
- Prepare students for life after high school with regards to personal financial responsibilities.

Course Description:
In Accounting, the students learn the full accounting cycle for a service business. We also touch on payroll and depreciation. Students will take part in the H&R Block Budget

Challenge
which is a ten week online personal finance simulation. Students will have a simulated job, pay bills, buy and use insurance, pay student loans, contribute to a savings account, and contribute to a 401(k). They will also take part in an in-depth research project regarding their career path of choice.

Itemized Course Content:

Semester 1

Changes that affect the Accounting Equation	Preparing Payroll Records
Analyzing Transactions	Plant Assets and Depreciation
Journalizing	*Personal Finance:
Posting to a General Ledger	• H&R Block Budget Challenge
Cash Control	
Creating a Work Sheet	• Career Research Project and Website creation
Financial Statements	
Adjusting and Closing Entries	

Course Title: Business Administration

Department: Business (subset of Social Studies)

Semesters: 2

Course Prerequisites: Junior/Senior status

Required Textbooks:

Principles of Business, Marketing, and Finance ISBN: 978-1-63126-455-9
*Business changes every day, therefore we use many online resources as well.
Course Goals/Objectives:

- Pique the interest of students with regards to all things business, introducing them to economics, business ethics, social responsibility, globalization, entrepreneurialism, management, marketing, and finance.

- Improve upon communication skills and public speaking.

- Prepare students for employability.

Course Description:
In Business Administration the students are exposed to many major career paths. They are required to be professional and respectful. The students learn an abundance of general business topics as well as personally develop their public speaking and both verbal and written communication skills. Students are asked to use many technological applications that are prevalent in both collegiate arenas and a general office setting.

Itemized Course Content:

Semester 1
Itemized Course Content:

Semester 1	Semester 2
Needs and Wants	Communication
Changing Business Environment	Finance
Economics	Marketing
Globalization	Management
Business Law	Employability Skills**
Ethics and Social Responsibility	
Forming a Business	
Entrepreneurship*	

Course Title: AP Programming/Java

Department:
Computers/Technology

Number of Semester/Credit(s):
Two Semesters

Course Prerequisite(s):
Solid foundation in English and mathematics
Previous programming experience is preferable

Required Textbook(s):
Online Class: All materials are provided online

Course Goals/Objective(s):
The objectives of this course are to:

1. Use and implement commonly used algorithms and data structures
2. Develop and select appropriate algorithms and data structures to solve new problems
3. Write solutions fluently in an object-oriented paradigm
4. Write, run, test and debug solutions in the Java programming language
5. Read and understand programs consisting of several classes and interacting objects
6. Read and understand a description of the design and development process
7. Understand the ethical and social implications of computer use

Course Description:
Computer science involves problem solving, hardware, algorithms and perspectives that help people utilize computers to solve real-world problems in everyday life. This course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design.

Itemized Course:

Semester 1	Semester 2
Unit 1: Introduction to Java	Unit 5: User-Defined Classes
Unit 2: Conditionals and Loops	Unit 6: Advanced Classes
Unit 3: Strings and One-Dimensional Arrays	Unit 7: Algorithms - Searching and Sorting
Unit 4: Methods	Unit 8: Two-Dimensional Arrays

Course Title: Programming/C++

Department:
Computers/Technology

Number of Semester/Credit(s):
Two Semesters

Course Prerequisite(s):
Previous programming experience is preferable

Required Textbook(s):
C++ Programming: From Problem Analysis to Program Design

Course Goals/Objectives:
The objectives of this offering are to:

1. Give an overview of computers and programming languages
2. Learn basic elements of C++
3. Explore how to read/write data from/to the standard input/output device
4. Discover how to use the selection control structures if and if... else
5. Examine int and bool data types, and logical (Boolean) expressions
6. Perform repetition (looping) control structures
7. Learn about standard (predefined) and user-defined functions
8. Learn about user-defined simple data types, namespaces, and string type
9. Use arrays and strings
10. Use records (structs)
11. Examine classes and data abstraction
12. Learn about inheritance and composition
13. Use pointers, classes, virtual functions, abstract classes, and lists
14. Use overloading and templates
15. Use exception handling
16. Use recursion
17. Use linked lists
18. Use stacks and queues
19. Learn about searching and sorting algorithms

Course Description:
This two-semester course is designed to motivate and stimulate all introductory programming students. As with any profession, practice is essential. Students will learn and practice key concepts, which include problem solving, design strategies, algorithms, and common data structures.

Itemized Course:

Semester 1	Semester 2
An Overview of Computers and Programming Languages	Records (Structs)
Basic Elements Of C++	Classes and Data Abstraction
Input/Output	Inheritance And Composition
Control Structures – Part 1	Pointers, Classes, Virtual Functions, Abstract Classes, And Lists
Control Structures – Part 2 (Repetition)	Overloading and Templates
User-Defined Simple Data Types, Namespaces, and the String Type-Defined Functions	Exception Handling
Arrays and Strings	Linked Lists

Course Title: Microsoft Office 2016: Introductory

Department:
Computers/Technology

Number of Semester/Credit(s):
One Semester

Course Prerequisite(s):
None

Required Textbooks(s):
Microsoft Office 2016: Introductory (9781305870017)

Course Goals/Objectives:
The objectives of this course are to:

1. Teach the fundamentals of Microsoft Windows 10, Microsoft Word 2016, Microsoft PowerPoint 2016, and Microsoft Excel 2016
2. Expose students to practical examples of the computer as a useful tool
3. Acquaint students with the proper procedures to create documents, presentations, and worksheets suitable for coursework, professional purposes, and personal use
4. Help students discover the underlying functionality of Office 2016 so they can become more productive
5. Develop an exercise-oriented approach that allows learning by doing

Course Description:
This course provides an overview of microcomputer applications including Microsoft Windows 10, Microsoft Office 2016, Microsoft Word 2016, Microsoft Excel 2016, and Microsoft PowerPoint 2016. No experience with a computer is assumed, and no mathematics beyond the high school freshman level is required.

Itemized Course:

Reading	Lab
Introduction to Technology	• How To: Your Turn • Internet Research exercises • Critical Thinking exercises
Office 2016 and Windows 10: Essential Concepts and Skills Office 365 Essentials	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Word Module 1	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Word Module 2	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Word Module 3	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft PowerPoint Module 1	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft PowerPoint Module 2	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft PowerPoint Module 3	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Excel Module 1	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Excel Module 2	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs
Microsoft Excel Module 3	• Extend Your Knowledge • Analyze, Correct, Improve • In the Labs

Course Title: Web Design and JavaScript

Department:
Computers/Technology

Number of Semester/Credit(s):
Two Semesters

Course Prerequisite(s):
<u>First Semester</u>: None
<u>Second Semester</u>: HTML

Required Textbook(s):
<u>First Semester</u>: *The Web Collection, Revealed Premium Edition: Adobe CS6*
<u>Second Semester</u>: *JavaScript*

Course Goals/Objectives:
<u>First Semester</u>:
The objectives of this course are to:

1. Get started with Dreamweaver
2. Develop a Web Page (HTML)
3. Work with text and cascading style sheets
4. Add images to Web Pages
5. Work with links and navigation
6. Position objects with CSS and tables
7. Managing a Web Server and files

<u>Second Semester</u>:
The objectives of this course are to:

1. Develop JavaScript programs and work with data types and operators
2. Use functions, events, and control structures
3. Manipulate the browser object model
4. Manipulate data in strings and arrays
5. Validate form data
6. Use object oriented programming
7. Debug and error handling

Course Descriptions:
<u>First Semester</u>: Adobe Dreamweaver CS6 is a web development tool that is used to create dynamic web pages containing text, images, hyperlinks, animation, sounds, video, and interactive elements. You can use Dreamweaver to create individual web pages or complex websites consisting of many web pages.

<u>Second Semester</u>: Students will learn about different techniques of writing JavaScript programs. HTML knowledge is required for this course. Advanced topics are covered such as object-

oriented-programming and the Document Object Model (DOM). After completing this course, students will be able to use JavaScript to build professional quality and dynamic websites.

Itemized Course:

Dreamweaver/HTML	
Ch1: Explore the Dreamweaver workspace. View a web page and use Help. Plan and set up a website. Add a folder and pages	Ch2: Create head content and set page properties. Create, import, and format text. Add links to web pages. Use the History panel and edit code. Modify and test web pages
Ch3: Create unordered and ordered lists. Create, apply, and edit Cascading Style Sheets. Add rules and attach Cascading Style Sheets. Use coding tools to view and edit rules.	Ch4: Insert and align images. Enhance an image and use alternate text. Insert a background image and perform site maintenance. Add graphic enhancements
Ch5: Create external and internal links. Create internal links to named anchors. Create, modify, and copy a Spry menu bar. Create an image map. Manage website links. Incorporate Web 2.0 technology	Ch6: Create a page using CSS layouts. Add content to CSS layout blocks. Edit and format CSS layout blocks. Create a table. Resize, split, and merge cells. Insert and align images in table cells Insert text and format cell content
Ch7: Perform website maintenance. Publish a website and transfer files. Check files out and in Cloak files. Import and export a site definition. Evaluate web content for legal use. Present a website to a client	