

WHITTIER UNION HIGH SCHOOL DISTRICT

Whittier, California

BOARD APPROVED: May 2024

COURSE OF STUDY

Course Title: INFORMATION SYSTEMS I

Department: BUSINESS DEPARTMENT

Grade Level: 9 - 12

COURSE DESCRIPTION

Students focus on information systems and business management principles to foster technology skills, emotional literacy, and develop as professionals. They develop critical thinking, complex reasoning, data analysis, and writing skills within the context of information technology. They discover the business world through project-based learning and case studies in ethics, project management, product failure, branding, marketing, and risk management. Through projects, interactive exercises, and discussions, students enhance teamwork, emotional intelligence, and leadership abilities. They apply knowledge and skills through digital product creation, projects, data analysis, and discussions, becoming proficient in responsible technology use. Emphasis is placed on collaboration, communication, and leadership. Course equips students to be responsible professionals and digital citizens in the modern workforce.

Length:	One year
Prerequisites for Enrollment:	None
Recommendations for Enrollment:	Computer literacy. Instructor approval. Regular attendance.
Type of Course:	WUHSD Practical Arts Credit UC/CSU A-G (g) Elective Credit
Alternative Graduation Option:	Meets computer literacy requirements
CTE Industry Sector:	Business and Finance
CTE Pathway:	Business Management
Related Career Occupations:	Chief Executive Officer Chief Financial Officer Chief Operating Officer Chief Information Officer Chief Information Security Officer

Information Systems Professional
Information Security Analyst
Information Technologist
Business Analytics Professional
Business Owner
Business Professional

I. COURSE COMPETENCIES

- A. Demonstrate competence in self-introduction
 - 1. Include appropriate details about past, present, future self
 - 2. Speak clearly and enunciate words
 - 3. Use professional language
 - 4. Maintain appropriate eye contact
- B. Demonstrate competence in production of digital work products
 - 1. Apply effective design principles
 - 2. Produce a product failure infographic
 - 3. Produce a product commercial
 - 4. Produce a career research presentation
- C. Demonstrate competence in use of digital presentation software
 - 1. Use graphics, transitions, and animations effectively
 - 2. Prepare a presentation using effective minimalist style
 - 3. Use bullet points effectively
 - 4. Integrate digital media
 - 5. Use a template, but personalize
 - 6. Present research to class
- D. Demonstrate competence in creation of a single player video game
 - 1. Design and create (or remix/edit) an interactive video game
 - 2. Include clear instructions (or clear objective)
 - 3. Use variables to keep score, lives, or time limit (or a combination)
 - 4. Game must be playable for longer than two minutes
 - 5. Conclude with a “win,” “loss,” or use both, if applicable
 - 6. Provide comments for key sections of code
 - 7. Animate player’s character
 - 8. Include sound effects
 - 9. Include at least one element of score, lives, or timer
 - 10. Include a change in game physics
 - 11. Include a change in game intensity/properties
- E. Demonstrate competence in use of the Internet and online business tools
 - 1. Format, send, and receive email
 - 2. Demonstrate difference between forward, reply, reply to all
 - 3. Demonstrate appropriate use of carbon copy/blind carbon copy (cc/bcc)
 - 4. Create one-time and recurring calendar events and meeting requests
 - 5. Respond appropriately to meeting requests
 - 6. Use a search engine to research and verify information
 - 7. Integrate information and media from Internet into digital work products
- F. Demonstrate competence contributing to class and peer discussions
 - 1. Contribute meaningful, relevant, on-topic ideas, thoughts, and opinions
 - 2. Distinguish among data, facts, opinions, and assumptions

3. Consider new ideas and information
 4. Consider ideas offered by others
 5. Challenge conclusions appropriately
 6. Contribute ideas in a positive, respectful manner
- G. Demonstrate competence in concepts of digital citizenship/ethical behaviors
1. Demonstrate understanding principles/importance of digital citizenship
 2. Use critical analysis to evaluate information for credibility, accuracy, bias
 3. Understand the potential risks and consequences of cyberbullying, harassment, and inappropriate online behavior
 4. Develop skills in managing online identity and personal information by creating strong passwords, understanding privacy settings, and being mindful of the information shared online
 5. Collaborate effectively and respectfully in online environments, demonstrating competence in virtual team, netiquette, and online tools
 6. Evaluate the impact of digital media on society including issues such as media literacy, digital footprints, and the effects of social media
 7. Reflect on personal digital habits and practices considering the balance between online and offline activities

II. COURSE OUTLINE

SEMESTER I

- A. Business Concepts I
 1. Business Professional Introduction
 2. Emotional Literacy
 3. Email Communication
 4. Meeting Requests
- B. Professional and Postsecondary Readiness I
 1. College Debt I
 2. Labor Data Sources and Statistics
 3. Future Career Digital Presentation Project
 4. Professional Conduct & Communication
- C. Computer Software
 1. Javascript Programming
 - a) Coding Basics
 - b) Animations
 - c) Object Physics
 - d) Game Design
 2. Video Game Creation Project
- D. Digital Citizenship

SEMESTER II

- E. Business Concepts I
 1. Marketing
 - a) Messaging
 - b) Advertising
 - c) Digital Video Media Creation
 - d) Digital Advertisement Project

- 2. Ethics
- 3. Resume
- 4. Data Analysis
 - a) Infographics
 - b) Product Failure
 - c) Product Failure Digital Infographic Project
- F. Professional and Postsecondary Readiness I
 - 1. Professional Language
 - 2. Active Listening
 - 3. Engagement
- G. Entrepreneurship
- H. Digital Citizenship

III. INSTRUCTIONAL METHODS

- A. Class lectures
- B. Class and group discussions
- C. Individual and group projects
- D. Guided practice via creation of digital work products
- E. Readings, critical thinking, writing assignments
- F. Group activities
- G. Demonstrations
- H. Independent research

IV. ASSESSMENT of STUDENT WORK

- A. Evaluate written critical analysis
- B. Assess digital work products
- C. Assess individual and group digital work projects and products
- D. Evaluate participation in classroom and group discussions
- E. Evaluate participation in classroom polls and online forums
- F. Assess digital journal entries
- G. Evaluate feedback provided to peers and instructor
- H. Evaluate research artifacts
- I. Evaluate digital assessments

V. INSTRUCTIONAL MATERIALS

- A. Journal articles, case studies, research
- B. Multimedia
- C. Web-based tools and applications
- D. Personal Computers (PCs), tablets, laptops, Chromebooks
- E. Software applications
- F. Group work products/outputs
- G. Guest speakers
- H. Research

BUSINESS & FINANCE SECTOR - BUSINESS MANAGEMENT PATHWAY - KNOWLEDGE & PERFORMANCE STANDARDS ADDRESSED BY INFORMATION SYSTEMS I, II, & III

A1.0 Explain entrepreneurship and the fundamentals of developing a new business.	
A1.1	Recognize personal traits and leadership styles of entrepreneurs and business leaders.
A2.2	Analyze management theories and their application within the business environment.
A2.0 Plan, organize, secure, and manage resources of a project to achieve specific goals.	
A2.1	Determine Specific, Measurable, Achievable, Realistic, Time-bound (SMART) goals for a project.
A2.2	Develop a project schedule, including the constraints of cost, time, and scope, to illustrate project structure using Gantt, Program Evaluation Review Technique (PERT), or other project planning tools.
A2.3	Optimize allocation of resources necessary to achieve predefined objectives.
A2.4	Evaluate beneficial change, or added value, of a specific project.
A3.0 Investigate the functions and techniques of management and organizational structure and distinguish between small and large companies.	
A3.5	Research past, present, and projected technological advances as they impact a particular pathway.
A3.6	Assess the value of various information and communication technologies to interact with constituent populations as part of a search of the current literature or in relation to the information task.
A4.0 Apply economic concepts as they relate to business	
A4.1	Identify factors of production needed to create wealth.
A4.2	Explain the role of business in a free-enterprise system.
A4.3	Recognize the determinants of supply and demand and their impact on pricing.
A6.0 Explain the importance of risk management and regulatory compliance in business.	
A6.1	Identify, assess, and prioritize risks.
A6.2	Describe the concept and process of risk management, including the use of risk management tools such as insurance.
A7.0 Utilize information and technology tools to conduct business effectively and efficiently.	
A7.2	Apply appropriate software used in business.
A7.3	Examine technological trends and analyze the impact of technological innovations on the marketing and distribution of goods and services
A7.4	Integrate appropriate use of the Internet in business.
A8.0 Construct a Marketing Plan.	
A8.1	Describe effective marketing techniques.
A8.2	Explore how products and services are conceived, developed, maintained, and improved in response to market opportunities.
A8.3	Conduct market analysis and assess the business organization's position within their industry.
A8.4	Interpret how market research is used to develop strategies for marketing

A8.5	Differentiate the components of a promotional plan (e.g., advertising, public relations, and sales promotion) and describe how the plan is used to achieve a stated outcome.
A8.6	Practice selling techniques used to aid customers and clients in making buying decisions.