Chino Valley Unified School District
High School Course Description

A. CONTACTS	
1. School/District Information:	School/District: Chino Valley Unified School District Street Address: 5130 Riverside Dr. Chino, CA 91710 Phone: 909-628-1201 Web Site: chino.k12.ca.us
2. Course Contact:	District Contact: Office of Secondary Curriculum and Instruction Position/Title: Director of Secondary Curriculum and Instruction Site: District Office Phone: (909) 628-1201 X1630
B. COVER PAGE - COURSE ID	
1. Course Title:	Computer Applications
2. Transcript Title/Abbreviation:	Computer App
3. Transcript Course Code/Number:	5827
4. Seeking Honors Distinction:	No
5. Subject Area/Category:	Meets UC/CSU "g" elective requirements
6. Grade Level(s):	9-12
7. Unit Value:	5 units per semester - 10 Credits
8. Course Previously Approved by UC:	Yes
9. Classified as a Career Technical Education Course:	Yes
10. Modeled after an UC-approved course:	Yes
11. Repeatable for Credit:	No
12. Date of Board Approval:	December 10, 2009 / May 24, 2012
Date of Revision Approval:	April 21, 2022

13. Brief Course Description:

Computer Applications is a one-year course designed to teach a variety of 21st- century skills to assist in student success. The curriculum is guided around meeting the introductory skills necessary for students to be successful in their pathway choice and to help them be career and college ready. The course revision includes curriculum for and preparation for MS Office certification in Microsoft Suite applications such as MS Word, MS Excel, MS Outlook, and MS Powerpoint. Integrated into this course are principles of economics, mathematical computation, reasoning and logic, communication, critical thinking, problem-solving, hands-on activities, and project-based learning. This course is aligned to meet the framework and standards for California Technical Education in the Information Communication Technologies sector.

14. Prerequisites:	None

15. Context for Course:

To live, learn, and work successfully in an increasingly complex and information-rich society, students must use technology effectively. This course is intended to introduce students to the basics of computer operation as well as technology productivity tools based on the National Educational Technology Standards for students as well as California Career Technology Education Model Curriculum Standards. Students will also develop an understanding of the ethical and legal issues that will enable them to become informed technology users of the future.

16. History of Course Development:

This course was originally designed to meet the standards developed by the business education consortium. With the ever-evolving technological world; this course has also evolved to now incorporate the CTE standards for the Information and Communication Technologies (ICT) sector. Computer Applications is a one-year course designed to teach a variety of 21st century skills to assist in student success. The course is an introductory level curriculum necessary for students to be successful in their pathway choice and to help them be career and college ready. This

includes not only the use of computer productivity applications but also computer operations, maintenance, and networking.	
17. Textbooks:	Test Out Office Pro (Computer Software)
18. Supplemental Instructional Materials:	Google Drive, www.google.com; History of Computers, https://sites.google.com/site/kingjwebquest/home

C. COURSE CONTENT

1. Course Purpose:

This course is designed for the California Career and Technical Education Information and Communication Technologies (ICT) sector. This course is aligned to the California Career and Technical Education standards, information support services pathway and is designed to be an introductory level course. To live, learn, and work successfully in an increasingly complex and information-rich society, students must use technology effectively. This course is intended to introduce students to the basics of computer operation, as well as technology productivity tools. Students will also develop an understanding of the ethical and legal issues that will enable them to become informed technology users of the future.

2. Course outline:

Unit 1 Microsoft and Google Applications

Students will be introduced to elements of Microsoft One Drive and Google Drive. Understanding and properly utilizing a variety of the components will enhance their understanding of Microsoft One Drive and Google Drive, which in turn will build their confidence in their knowledge of Microsoft and Google platforms. Students will learn about and be able to identify the various components, various options and their purpose, various document options in Microsoft One Drive and Google Drive.

Unit 2 Computer Hardware and Software

This unit will introduce the student to the major components of the computer including input, output, memory, storage, processing, software, and the operating system. Understanding computer hardware helps students build confidence in their computing skills and enhances their understanding of computer software. Computer hardware systems and computer software systems share many similarities in their structures. Personal computers, desktop computers, laptops, and similar computer systems have multiple hardware components, sometimes packaged in one unit and sometimes consisting of physically separate components.

Unit 3 History of Computers

This unit will have students learn about the development of the computer. Students will learn how computers have changed since the 1940's in size and technology used. Students will look at notable computers over time and why they were created. Students will examine the current needs of computers and what possible future needs will do for computers.

Unit 4 Word Processing and Digital Literacy

This unit will have students learn the need of word processing skills such as typing with speed and accuracy and 10-key proficiency. Students will work individually to develop fine motor skills to improve their typing skills to help with academic needs and the upcoming business world need to rapidly be able to create an effective email, memo, or letter.

Unit 5 Microsoft Word Standard

This unit will explore Microsoft Word and how this software will be utilized as students learn the industry business software used to create professional business documents. Understanding, applying, analyzing, and evaluating various concepts within the software will empower students to create business professional text-based documents. Students will develop skills with research papers, references, and sources. Within the business world, students will design letterheads, business letters, memos, and flyers.

Unit 6 Microsoft Powerpoint
This unit will have students create and manage effective presentations, incorporating design elements such as animations, smart art, illustrations, tables, charts, and pictures. They will apply aesthetic and physical elements to connect the audience to messages, including transitions and handouts.

Unit 7 Database Programs
This unit will focus on the use of a database management program to create a database, sort, and print a variety of reports.

Unit 8 Microsoft Excel
This unit will focus on the creation of spreadsheets and charts that involve text, raw numbers, formulas, functions, formatting, and layouts. Students will learn about what-if statements, sorting, importing, and manipulating data. Demonstrations of the myriad of charts will be given to help students develop the rationale on which chart type to use in various real-world scenarios.

Unit 9 Professional Communication
This unit will focus on how to use different environments, actual and digital, to properly communicate and work collaboratively. Students will use various platforms to create and format emails, memos, letters, and other communications. Students will learn the proper way to greet, communicate with, and conclude a conversation in a professional setting.

3. Key assignments:

Unit 1 Microsoft and Google Applications

- Student Production: Students will write and save documents in Microsoft One Drive: docs, Excel, Powerpoint, etc.
- Student Production: Students will write and save documents in Google Drive: docs, sheets, slides, etc.
- Assignment Completion Method: Students will utilize Microsoft 365 and Google to sign into their email accounts and complete a project using Microsoft Word for the written portion and Excel for their presentation.
- Students Will Learn: Chino Valley Unified School District Microsoft 365 and google classroom platforms/ student logins, (email) and Google sheets & slides (converting documents) and Aeries platform for grades.

Unit 2 Computer Hardware and Software

- Identifying Hardware Components - Where possible, provide each student with the opportunity to take apart an old computer and locate and identify the various components.
- Identifying Software Components - Discuss the role of system software and application software.
- Describing the Interaction of Components - Students perform a role play where each student actor represents one component – hardware or software. Scripts describe their general actions; the teacher provides the data for the interactions.
- Purchasing a Computer - Students locate computer advertisements in print or online. A comparative table is created that lists the advantages and disadvantages of at least three advertised computers for possible personal use.
- File Systems and Organization - Explain directory structure. Students create and use nested directories. Students should explain the advantages and disadvantages to a flat structure vs. A hierarchical structure methodology.
- Diagnose & Troubleshoot PC Problems - Discuss common PC problems and solutions. Have students experience a practical lab where they must diagnose and fix a set of “broken” pcs (disconnected network cables, unplugged monitor cables, moved/deleted shortcut icons, etc.)

Unit 3 History of Computers

- History of Computers - Students create a timeline on word processors for the development and evolution of computer hardware, possibly including pre-electronic computational devices. The timeline can be augmented, where possible, with examples of earlier hardware, photographs, or advertisements, and notes as to cost and capabilities. Challenge students to use their imagination and extend the timeline forward 10 years.
- Students will identify the applications of computers in personal and work situations.
- Students will learn and demonstrate the basic operating system commands of the computer.

Unit 4 Word Processing and Digital Literacy

- Students will demonstrate their knowledge of internet safety and digital citizenship by conducting research and evaluating online sources.
- They will display an understanding of how to work and interact safely on the web.
- They will apply the knowledge learned to analyze and answer the following questions:
    - Why is it important to understanding the rights and responsibilities of a digital citizen?
    - Why is it important to keep your private information online private?
    - Why is it important to be skeptical about whom you communicate with online?
    - What does it mean to have a digital footprint?
    - Identify what personal information should remain private, and what is suitable to be shared publicly.
    - If you were going to give a presentation on using the internet, what would you include?
    - What do you think are the most important reasons for using the internet effectively?
    - Students will define district policy concerning software protection.
- Students will work individually to evaluate and apply ethical principles that encourage responsibility and trust when using the internet. Students will write an essay to identify and explain at least three important safety concerns to keep in mind when using the internet. They will use specific examples and explanations that refer to the material they have learned during the lessons.

Unit 5 Microsoft Word Standard

- Students will create, keep, and maintain a digital portfolio of different documents like a resume, research paper, business cards, letterhead, letter of introduction, etc. Students should realize the effects of style, look, and conciseness in general communication for business and academia in this simulated environment.
- Students will create a professional multi-page newsletter about emerging trends in computer technology and how they improve business practices. Newsletter will utilize learned concepts within the unit.

Unit 6 Microsoft Powerpoint

- Students will create, keep, and maintain a digital portfolio of different presentations like an about me, career research presentation, city presentation, college research, etc. Students should realize the effects of style, look, and conciseness in general communication for business and academia in this simulated environment.
- Students will research techniques to make presentations more effective. The student will then create a professional and effective presentation of the information that makes their business attractive to potential customers. The student will then deliver a presentation to the class utilizing public speaking skills.

Unit 7 Database Programs

- Students will master the following data base skills: loading and saving, setting up record layouts, arranging, formatting, editing, and printing records.
- Students will demonstrate their ability to use database applications in a variety of areas.
- Students will complete a real-life database simulation project such as creating mailing address labels.

Unit 8 Microsoft Excel

- Students will act as chief accountant for a company and will develop and manipulate a sales analysis worksheets producing charts, graphs, and summed data.
- Students will build a worksheet for a moving company that analyzes the financing needs for the company's first year in business. Students will start with a table of data that they will have to plug into a worksheet and manipulate the data to provide monthly averages, maximums, minimums, and total expenses.

- Students will work as a financial planner and will utilize a given table of data and will create a worksheet that will project annual gross margin, total expenses, operating income, income taxes, and net income for the next eight years based on an assumption table.

Unit 9 Professional Communication

- Students will work individually to create a formal email, formal letter, and memo that follows appropriate formatting. Students will learn how to attach and share documents/files through Microsoft Office and Google Drive. Students will learn how to properly create mailing address labels and business cards through Microsoft Office.
- Students will demonstrate the ability to use integrated software applications to produce a variety of documents.
    - Students will integrate databases and spreadsheets into word processing documents.
    - Students will gain exposure to the integration of graphics into word processing and spreadsheet documents.
- Students will complete a personality survey to assist in a career research project. Students will compare and contrast two different careers that suit their personality survey results and decide which best fit is for them. Students will write a research paper in MLA format and present their findings in a Microsoft Powerpoint.

4. Instructional Methods and/or Strategies:

- This course uses an online curriculum which gives the students access to video lessons and virtual simulator exercises to complete lab projects and assessments.
- Students are expected to complete the virtual labs and practice questions assessments from each unit.
- Each topic will be discussed during class with the students.
- Students will complete hands on projects that reflect the material learned in the online curriculum.

5. Assessment Including Methods and/or Tools:

The evaluation of student progress and evaluation will be based on the following criteria outlined in Board Policy:

- Assessments: 60-75% of the final grade
- Assignments and class discussions: 25-40% of the final grade