
High School Course Description Microsoft Excel

Course Title: Microsoft Excel

Course Number: CTE1145

Grade Level: 9-12

Meets a UC a-g Requirement: No

CTE Course Sequence:

Information & Support Services

Meets High School Graduation Requirement for:

Computer Literacy

Curricular Area: Business Education

Length: One Semester (repeatable up to 15 credits)

Prerequisites: Repeats must have a “C” or better or teacher permission

Meets NCAA Requirement: No

Course Description

The Microsoft Excel course is designed to expose students to basic components of the Microsoft Excel program contained in the Microsoft Office Suite. With excel, student will learn to organize data, complete calculations, make decisions, graph data, develop professional looking reports and publish organized data to the web, and access real time data from websites. Students will be exposed to the four major parts of excel which include workbooks and worksheets, charts, tables and web support.

This course exposes students to Industry standards aligned with the Microsoft Certified Application Specialist (MCAS) for Microsoft Excel. Students will work individually, and in small groups, developing the hands on skills needed to be successful in understanding the core and advanced features of Microsoft Excel. The emphasis of this course will align with the competencies identified in the MCAS certification process. This course satisfies the District computer literacy requirement.

The MCAS certification is a global program, which recognizes individuals who have achieved a certain level of mastery with Microsoft Office products. It provides a framework for measuring end-user proficiency with these applications and their ability to integrate them with other software applications. A Microsoft Certified Application Specialist is an individual who has certified their skills in one or more of the Microsoft Office desktop applications of Microsoft Word, Excel, PowerPoint, Outlook, or Access. These certification examinations utilize leading edge computer-based techniques to verify knowledge and productivity in a series of “practical” desktop activities at the “Core”, “Expert” and “Master” skill levels.

MCAS certification offers a means for students to demonstrate their knowledge of the world’s most recognized and utilized suite of communication, data collection, and presentation computer applications; a standards by which employers can recruit candidates with the most current desktop skills; a baseline for academic institutions to measure desktop preparation; a means to verify and measure training results; and a globally recognized credential which both employers and job applicants can use for successful placement.

Alignment

This course is aligned to the State of California CTE Model Curriculum Standards and is the Capstone course for the Information and Support Services Sequence.

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Instructional Materials

Required Textbook(s)

Microsoft Office 2007, Introductory Concepts and Techniques; Shelly, Cashman, Vermaat, et al, Windows XP Edition, Thomsen Course Technology, 2008, ISBN-13: 978-1-4188-4327-4

Microsoft Office 2007, Advanced Concepts and Techniques; Shelly, Cashman, Vermaat, et al, Thomsen Course Technology, 2007; ISBN-: 978-1-4188-4332-8

Microsoft Office 2007: Post-Advanced Concepts and Techniques; Shelly, Cashman, Vermaat, et al, Thomsen Course Technology, 2007, ISBN: 978-1-4188-4334-2

Supplemental Materials

1. “Microsoft Office 2007, Introductory Concepts & Techniques Instructor Resources,” Shelly, Cashman, Vermaat, et al, Thomsen Course Technology, 2007, ISBN: 1-4239-1225-X.
2. “Microsoft Office 2007, Advanced Concepts & Techniques Instructor Resources,” Shelly, Cashman, Vermaat, et al, Thomsen Course Technology, 2007, ISBN: 1-4239-1226-8.
3. “Microsoft Office 2007: Post-Advanced Concepts and Techniques Instructor Resources,” Shelly, Cashman, Vermaat, et al, Thomsen Course Technology, 2007, ISBN: 1-4239-1226-8.
4. “Sam 2007 Assessment 2.0,” Course Technology, 2007, ISBN: 978-1-4239-1346-7 \$2200/3yr 2 site license.
5. “Sam 2007 Assessment 2.0, Instructor Resources,” Course Technology, 2007, ISBN: 1-4239-1346-9.
6. “Casegrader Office 2007,” Course Technology, 2007, ISBN: 978-1-4239-9856-3. (don’t purchase)
7. “Casegrader Office 2007, Instructor Resources,” Course Technology, 2007, ISBN: 1-4239-9856-1.
8. “Mastering Applications in the Real World: Discipline-Specific Projects for Microsoft Office 2007, Introductory,” Course Technology, 2007, ISBN: 978-1-4239-2528-6.
9. “Mastering Applications in the Real World: Discipline-Specific Projects for Microsoft Office 2007, Introductory Instructor Resources,” Course Technology, 2007, ISBN: 1-4239-2528-9. \$22.00
10. “Mastering Applications in the Real World: Discipline-Specific Projects for Microsoft Office 2007, Advanced,” Course Technology, 2008, ISBN: 978-1-4239-2527-9. \$22.00
11. “Mastering Applications in the Real World: Discipline-Specific Projects for Microsoft Office 2007, Advanced Instructor Resources,” Course Technology, 2008, ISBN: 1-4239-2527-0.
12. “Microsoft Certified Application Specialist Exam Reference for Microsoft Office 2007,” Bunin, Campbell, Clemens, Conrad, Ruffolo, Thomsen Course Technology, 2007, ISBN: 978-1-4239-0555-4. \$18.25
13. “Microsoft Certified Application Specialist Exam Reference for Microsoft Office 2007 Instructor Resources,” Bunin, Campbell, Clemens, Conrad, Ruffolo, Thomsen Course Technology, 2007, ISBN: 1-4239-0555-5.
14. “MCAS Office 2007 Certification Workbook,” Bunin, Campbell, Clemens, Conrad, Ruffolo, Thomsen Course Technology, 2008, ISBN: 978-1-4239-0439-7. \$24.25
15. “MCAS Office 2007 Certification Workbook Instructor Resources,” Bunin, Campbell, Clemens, Conrad, Ruffolo, Thomsen Course Technology, 2008, ISBN: 1-4239-0439-7.

Software

Microsoft Office 2007 Professional, Microsoft Corporation, 2007

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Exit Criteria Evaluation will be based on tests covering the material in the textbook, written assignments (in class and homework), class attendance/participation, and formal report/oral presentations as follows:

<u>Activities</u>	<u>Percentage</u>
Examinations.....	30%
Lab Assignments / Homework.....	40%
Class Participation/Attendance	10%
Integration Project and Final Exam	20%
Total:	100%

Development Team

This Course of Study was updated in 2009 by Stephen Boone, Tina Petersen and Jennifer Wymer.

UNIT PLANS

Unit 1: Introduction to Excel, Spreadsheets and Keypad

Week 1-3

State Content Standards Covered:

1.0 Academics

1.1 Mathematics: (1.7) Solve problems that involve discounts, mark-ups, commissions, and profits and compute simple and compound interest.

5.0 Problem Solving and Critical Thinking – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.

5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.

10.0 Technical Knowledge and Skills – Students understand the essential knowledge and skills common to all pathways in the Information Technology sector.

10.6 Understand the interrelationships between hardware components and supportive software.

Pathway Standard

A. Information Support and Services Pathway

A7.0 Students understand software applications and life-cycle phases.

A7.1 Know common industry standard software and its applications.

Unit 2: Creating a Worksheet and Embedded Chart

Weeks 4-5

4.0 Technology – Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments.

4.2 Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.

5.0 Problem Solving and Critical Thinking – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.

5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.

Unit 3: Formulas, Functions, Formatting & Web Queries

Weeks: 6-8

4.0 Technology – Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments.

4.3 Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.

5.0 Problem Solving and Critical Thinking – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.

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- 5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.

Accounting Services Pathway

- A2.6 Know payroll Procedures

Unit 4: What-If Analysis, Charting, & Working with Large

Weeks: 9-11

Worksheets

- 5.0 Problem Solving and Critical Thinking** – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.
- 5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.
- 5.3 Use critical thinking skills to make informed decisions and solve problems.

Unit 5: Creating a Web Page Using Excel

Weeks: 12-13

- 4.0 Technology** – Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments.
- 4.4 Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.
- 5.0 Problem Solving and Critical Thinking** – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.
- 5.3 Use critical thinking skills to make informed decisions and solve problems.
- 9.0 Leadership and Teamwork** – Students understand effective leadership styles, key concepts of group dynamics, team and individual decision making, the benefits of workforce diversity, and conflict resolution
- 9.3 Understand how to organize and structure work individually and in teams for effective performance and the attainment of goals.

Unit 6: Integration Project

Weeks: 14-15

- 5.0 Problem Solving and Critical Thinking** – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.
- 5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.
- 5.2 Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components.
- 11.0 Demonstration and Application:** Students demonstrate and apply the concepts contained in the foundation and pathway standards.

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Business Financial Management Pathway

C1.1 Create a budget to calculate long-term projections.

C2.6 Analyze investment and finance options available to prepare a cost-benefit analysis.

Unit 7: Career Exploration/Project

Weeks: 16-17

- 3.0 Career Planning and Management:** Students understand how to make effective decisions, use career information, and manage personal career plans.
- 3.1 Know the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers.
- 3.2 Understand the scope of career opportunities and know the requirements for education, training, and licensure.
- 5.0 Problem Solving and Critical Thinking** – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.
- 5.3 Use critical thinking skills to make informed decisions and solve problems.
- 7.0 Responsibility and Flexibility** – Students know the behaviors associated with the demonstration of responsibility and flexibility in personal, workplace and community settings.
- 7.1 Understand the qualities and behaviors that constitute a positive and professional work demeanor.

Unit 8: Final Review/Exam

Week: 18

- 5.0 Problem Solving and Critical Thinking** – Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking and problem solving techniques.
- 5.1 Apply appropriate problem solving strategies and critical thinking skills to work related issues and tasks.
- 5.3 Use critical thinking skills to make informed decisions and solve problems.
- 11.0 Demonstration and Application:** Students demonstrate and apply the concepts contained in the foundation and pathway standards.

Learning Experiences and Instruction:

Support for English Language Learners:

Extra time or modified versions of assignments can be given. Other strategies include assigning students to work with a partner or provide a language assistant, if available.

Support for Special Education Students:

Extra time or modified versions of assignments can be given. Other strategies include assigning students to work with a partner or provide an instructional aide, if available. Special needs students can be enrolled in collaboration class along with Work Ability students.

Stretching the Lesson for GATE Students:

Lessons can be stretched by adding additional tasks to assignments or creating advanced level projects.