Course of Study Information Page

Course Title: Computer Technology 5 (#484) & Computer Technology 6 (#488)

Rationale: A continuum of courses, including advanced classes in technology is needed. At Union Mine, the 4 x 4 schedules create an immediate need for additional elective options. This course provides the opportunity for students to increase their technical skills through a year-long (one term) course. In addition, this course offers students the opportunity to explore video production as a possible career option.

Course Description: This course will cover more advanced Microsoft office 2000/XP functionality for skilled users, including such topics as macros and Visual Basic for Applications (VBA). Included are two or three projects for each application in the suite, plus a capstone case study integrating the applications and using more advanced Microsoft office 2000/XP features. This course is approved for the Microsoft office user Specialist (MOUS) program Certification Exam at the Expert Level when used in a three-course sequence with Microsoft Office 2000/XP Introductory Concepts and Techniques and Advanced Microsoft Office 2000/XP Concepts and Techniques.

Length of Course:	Year – UMHS Two semesters - EDHS, PHS, ORHS, IHS
Grade Level:	10-12
Credit: x Number of units: 5 credits Meets graduation requirements Request for UC "a-g" requirements College Prep Elective Vocational	5 units per semester
Prerequisites:	Successful completion of Computer Technology ½ and Computer Technology 3/4
Department(s):	Business/Technology
District Sites:	EDHS, ORHS, PHS, UMHS, IHS
Board of Trustees Adoption Date:	January 22, 2002
Textbook(s)/Instructional Materials:	
Date Adopted by the Board of Trustees:	

How Does This Course Align With or Meet State and District Content Standards? (Please attach a copy of the standards used) –

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – WORD PROJECT 7: Working with a Master Document, an Index, and a Table of Contests

GOAL: Students will be introduced to advanced techniques for creating, editing, and mapping a document

The st	OBJECTIVES tudent will:	SUGGESTED ACTIVITIES	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	Insert, modify, review, and delete comments. Track changes in a document. Save multiple versions of a document. Accept and reject tracked changes. Embed an Excel worksheet into a Word document. Add and modify a caption. Create a cross-reference. Mark index entries. Keep paragraphs together. Add an autoshape. Group drawing objects. Create a table of figures. Build and modify an index. Add a bookmark. Create alternating headers Set a gutter margin Use the Document Map	 Read Project 7 "Working with a Master Document, an Index, and a Table of Contents" Complete Project 7 Vocabulary Complete Project 7 Complete "In the Lab #3" Complete Project 7 exam with a passing score of at least 70% 	3

Content Area Standards (Please identify the source)
The students will achieve the following content standards:
National Technology Standards:
1, 2, 4, 5, and 6
EDCOE Technology Standards and Competencies:
Basics and Research Applications and Presentations Multimedia/Desk Top Publishing
National Business Education Standards:
Communication, Computation, and Information Technology
California Business Education Standards:
1.0 Business Core
1.6 Information Technologies
4.0 Computer Science and Information Technology
4.1 Computer Science and Information Technology
4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – WORD PROJECT 8: Creating an Online Form

GOAL: Students will be able to create an online form

	OBJECTIVES		SUGGESTED ACTIVITIES
The st	tudent will:		
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	Design an online form. Create a document template. Highlight text. Insert a table into a form. Insert a text box into a form. Insert a drop-down list box into a form Insert a check box into a form. Format form fields Use the Format Painter button Add Help text to form fields. Draw and format a rectangle. Animate text. Protect a form. Open a new document based on a template. Fill out a form. Save data on a form in a text file. Modify the location of workgroup templates.	1. 2. 3. 4. 5.	Read Project 8 "Creating an Online Form" Complete Project 8 Vocabulary Complete Project 8 Complete "In the Lab #2" Complete Project 8 exam with a passing score of at 70%

Content Area Standards (Please identify the source)	
ne students will achieve the following content standards:	
ational Technology Standards:	
1, 2, 4, 5, and 6	
DCOE Technology Standards and Competencies:	
Basics and Research Applications and Presentations Multimedia/Desk Top Publishing	
ational Business Education Standards:	
Communication, Computation, and Information Technology	
alifornia Business Education Standards:	
2.0 Business Core	
1.6 Information Technologies	
4.0 Computer Science and Information Technology	
4.1 Computer Science and Information Technology	
4.3 Computer Science	

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – WORD PROJECT 9: Using Visual Basic for Applications (VBA) with Word GOAL: Students will be introduced to VBA code through Word

The st	OBJECTIVES tudent will:	SUGGESTED ACTIVITIES
The state 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	tudent will: Set a security level in Word. Unprotect a document. Format a character as an in margin drop cap. Create a new file. Fill a drawing object with a bitmap picture. Add 3-D effect to a drawing object. Record and execute a macro. View a macro's VBA code. Add comments to a macro's VBA code. Modify a macro's VBA code. Add code statements in a VBA code. Insert a VBA procedure. Plan a VBA procedure. Enter code statement in a VBA procedure. Run a macro when a user exits a form field. Insert an Active X control. Format and set properties for an Active X control. Write a VBA procedure for an Active X control.	 Read Project 9 "Using Visual Basic for Applications (VBA) with Word" Complete Project 9 Vocabulary Complete Project 9 Complete "In the Lab #1" Complete Project 9 exam with a passing score of at least 70%

Content Area Standards (Please identify the source)	
he students will achieve the following content standards:	
lational Technology Standards:	
1, 2, 4, 5, and 6	
EDCOE Technology Standards and Competencies:	
Basics and Research Applications and Presentations Multimedia/Desk Top Publishing	
National Business Education Standards:	
Communication, Computation, and Information Technology	
California Business Education Standards:	
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Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – EXCEL PROJECT 7: Using Visual Basic for Application (VBA) with Excel

GOAL: Students will be introduced to VBA code through Excel

The st	OBJECTIVES udent will:		SUGGESTED ACTIVITIES
1.	Use the Undo button to undo multiple changes.	1.	Read Project 7 "Using Visual Basic for Application (VBA) with Excel"
2.	Use passwords to allow and authorized user to access the protection scheme.	2. 3.	Complete 7 Vocabulary Complete Project 7
3.	Use the macro recorder to create a macro.	4. 5.	Complete "In the Lab #2" Complete Project 7 exam with a passing
4.	Execute a macro.		score of at least 70%
5.	Customize a menu toolbar by adding a button.		
6.	Customize a menu by adding a command.		
7.	Understand Visual Basic for Application code.		
8.	Add controls to a worksheet, such as command buttons, scroll bar, check boxes, and spin bottons.		
9.	Assign properties to controls.		
10.	Write a procedure to automate data entry into your worksheet.		
11.	Validate incoming data.		
12.	Explain event-driven programs.		

Content Area Standards (Please identify the source)
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National Technology Standards: 1, 2, 4, 5, and 6 EDCOE Technology Standards and Competencies: Basics and Research Applications and Presentations Multimedia/Desk Top Publishing National Business Education Standards: Communication, Computation, and Information Technology California Business Education Standards: 4.0 Business Core 1.6 Information Technologies 4.0 Computer Science and Information Technology 4.1 Computer Science and Information Technology 4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – EXCEL PROJECT 8: Auditing, Data Validation, and Solving Complex Problems

GOAL: Students will be able to validate, audit, and solve complex problems in Excel spreadsheets.

The student will:	GESTED ACTIVITIES
1.Use the Auditing toolbar to analyze a worksheet.1.Read Pro Validation2.Add validation rules to cells.Problems3.Use trail and error to solve a problem on a worksheet.2.Complete Gomplete4.Use Excel's Solver to solve a complex problem.4.Complete Solver to solve a complex Solver	oject 8 "Auditing, Data n, and Solving complex s" e Project 8 Vocabulary e Project 8 e "Cases and Places #4" e Project 8 exam with a passing at least 70%

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National Business Education Standards:	
Communication, Computation, and Information Technology	
California Business Education Standards:	
5.0 Business Core	
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4.1 Computer Science and Information Technology	
4.2 Computer Science	

4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 1 – EXCEL PROJECT 9: Importing External Data, Tracking and Routing Changes, and Creating Data Maps Pivot

GOAL: Students will be able to create spreadsheets that can be used to show variations in data

OBJECTIVE The student will:	S		SUGGESTED ACTIVITIES
 Important data from a Important data From a base. Important data From a Insert, edit, and removes Explain collaboration a Track changes and sh Route a worksheet to Accept and reject trace to a workbook. Create, edit, and form Create a PivotChart a Analyze a worksheet of PivotChart. Explain the concepts merging workbooks. 	n Access data Web page. e a comment. echniques. are a workbook. a data other users. ked changes made at a data map. nd PivotTable. lata base using a	1. 2. 3. 4. 5.	Read Project 9 "Importing External Data, Tracking and Routing Changes, and Creating Data Maps, PivotCharts, and PivotTables" Complete Project 9 Vocabulary Complete Project 9 Complete "In the Lab #3" Complete Project 9 exam with a passing score of at least 70%

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National Technology Standards:
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National Business Education Standards:
Communication, Computation, and Information Technology
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4.3 Computer Science
4.0 Computer Science and Information Technology 4.1 Computer Science and Information Technology

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – ACCESS PROJECT 7: Creating A Report Using Design View

GUAL.	Students will be able to create a repo	лпА	ccess using design view
The st	OBJECTIVES udent will:		SUGGESTED ACTIVITIES
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22.	Open a database. Create Additional Tables. Import data from an ASCII text file. Change layout. Relate several tables. Create a Lookup Wizard fields that use a separate table. Change join properties in a query. Change field properties in a query. Change field properties in a query. Filter a query's record set. Create a parameter query. Run a parameter query. Create queries for reports. Create a report. Add fields to a report. Modify a subreport. Move a subreport. Add a date. Add a page number. Bold labels. Change margins Create mailing labels. Print mailing labels	1. 2. 3. 4. 5.	Read Project 7 "Creating a Report in Design View" Complete Project 7 Vocabulary Complete Project 7 Complete "In the Lab #3" Complete Project 7 exam with a passing score of at least 70%

GOAL: Students will be able to create a report in Access using design view

Content Area Standards (Please identify the source)
The students will achieve the following content standards:
National Technology Standards:
1, 2, 4, 5, and 6
EDCOE Technology Standards and Competencies:
Basics and Research Applications and Presentations Multimedia/Desk Top Publishing
National Business Education Standards:
Communication, Computation, and Information Technology
California Business Education Standards:
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4.1 Computer Science and Information Technology
4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – ACCESS PROJECT 8: Customizing Forms Using (VBA), Charts and PivotTable Objects

GOAL: Students will be able to customize forms in Access using VBA, charts, and PivotTable Objects

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
 Add command buttons to a form. Modify VBA code associated with a command. Add a combo box to a form. Use a combo box. Modify the properties of a combo box. Create a form using Design view. Add a subform to a form. Add a chart to a form. Create a PivotTable form. Use a PivotTable form. 	 Read Project 8 "Customizing Forms Using VBA, Charts, and PivotTable Objects" Complete Project 8 Vocabulary Complete Project 8 Complete "In the Lab #3" Complete Project 8 exam with a passing score of at least 70%

Content Area Standards (Please identify the source)
The students will achieve the following content standards:
National Technology Standards:
1, 2, 4, 5, and 6
EDCOE Technology Standards and Competencies:
Basics and Research Applications and Presentations Multimedia/Desk Top Publishing
National Business Education Standards:
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4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – ACCESS PROJECT 9: Administrating a Database System

GOAL: Students will be able to administer a basic database system

The student will:1.Convert a database to an earlier ver of Access.2.Use the table Analyzer, Performance Analyzer, and Document.3.Use an input mask.4.Specify referential integrity options	Database System" 2. Complete Project 9 Vocabulary 3. Complete Project 9 4. Complete "In the Lab #1" 5. Complete Project 9 exam with a passing
of Access. 2. Use the table Analyzer, Performance Analyzer, and Document. 3. Use an input mask.	Database System" 2. Complete Project 9 Vocabulary 3. Complete Project 9 4. Complete "In the Lab #1" 5. Complete Project 9 exam with a passing
Analyzer, and Document. 3. Use an input mask.	 2. Complete Project 9 Vocabulary 3. Complete Project 9 4. Complete "In the Lab #1" 5. Complete Project 9 exam with a passing
3. Use an input mask.	5. Complete Project 9 exam with a passing
5. Open a database in exclusive mode	. score of at least 70%
6. Set a password.	
7. Encrypt a database	
8. Create a grouped data access page	
9. Preview a data access page.	
10. Create and use a replica.	
11. Synchronize a Design Master and a replica.	
12. Create a new SQL query.	
13. Include only certain fields.	
14. Include all fields.	
15. Use a criterion involving a Numeric f	ïeld.
16. Use a criterion using a text field.	
17. Use a compound criterion.	
18. Use NOT in a criterion.	
19. Use a computed field.	
20. Sort the results.	
21. Use built-in functions.	
22. Use multiple functions in the same command.	
 Use grouping. Restrict the groups that display. 	
25. Join tables.	
26. Restrict the records in a join.	
27. Join multiple tables.	

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National Business Education Standards:	
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- 4.1 Computer Science and Information Technology 4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – POWER POINT PROJECT 5: Creating a Self-Running Presentation Using Animation Effects

GOAL: Students will be able to create a self-running presentation using animation effects

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
 Add a presentation within a presentation. Insert animated clip art. Apply animated effects. Insert an Excel chart. Build a PowerPoint chart or graph. Add a table from Word. Insert an Autoshape. Rotate an Autoshape. Customize a color scheme. Omit background graphics from the master slide. Set automatic slide timings. Create a self-running presentation. 	 Read Project 5 "Cresting a Self-Running Presentation Using Animation" Complete Project 5 Vocabulary Complete Project 5 Complete "Cases and Places #4" Complete Project 5 exam with a passing score of at least 70%

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National Business Education Standards:
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California Business Education Standards:
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4.0 Computer Science and Information Technology
4.1 Computer Science and Information Technology
4.3 Computer Science

Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – POWER POINT PROJECT 6: Using Visual Basic for Applications (VBA) with PowerPoint

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OBJECTIVES The student will:	SUGGESTED ACTIVITIES
 Create a toolbar. Customize a toolbar by adding a bu Use the macro recorder to create a macro. Customize a menu by adding a command. Open a presentation and print it by executing a macro. Understand Visual Basics for Applications Code. Add controls, such as command bu option buttons, and check boxes to form. Assign properties to controls. Create a form to automate data ent 10. Write a procedure to automate data entry. Create a user interface. Use the Visual Basic Editor to enter procedure. Export an outline to Microsoft t Wor 	2. Complete Project 6 Vocabulary 3. Complete Project 6 4. Complete "In the Lab #1" 5. Complete project 6 exam with a passing score of at least 70% ttons, a ry.

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Basics and Research Applications and Presentations Multimedia/Desk Top Publishing
National Business Education Standards:
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Department: Business/Technology Course Title: Computer Technology 5 and 6

SEMESTER 2 – CULMINATING PORTFOLIO:

GOAL: Students will be able to produce a portfolio of that presents their knowledge of Microsoft Office and relates to careers in which MOUS certification is recommended

OBJECTIVES The student will:	SUGGESTED ACTIVITIES
 Create a portfolio employing the Microsoft Office 2000 techniques learned in class. 	 Discuss requirements of portfolio, take MOUS certification test, discuss career choices and employability skills, create portfolio.

Content Area Standards (Please identify the source)	
The students will achieve the following content standards:	
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Basics and Research Applications and Presentations Multimedia/Desk Top Publishing	
National Business Education Standards:	
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California Business Education Standards:	
12.0 Business Core	
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4.0 Computer Science and Information Technology	
4.1 Computer Science and Information Technology	
4.3 Computer Science	