COURSE: Computer Applications

GRADE LEVEL: 9 & 10

LENGTH OF COURSE: 90 days (1 semester)

TEXT: A Guide to Microsoft Office 2000 Professional for Windows

PUBLISHER: Lawrenceville Press

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COURSE DESCRIPTION:

This course covers the Microsoft Office Suite. Microsoft Word – a word processor, and Microsoft Excel – a spreadsheet program, are two of the software packages students will learn. Using Microsoft Word, students will create, edit and format documents. Basic word processing skills through column layout and use of graphics are covered. Students create spreadsheets to analyze data, perform calculations and create charts. Two more applications, Microsoft Access – a database management and Microsoft PowerPoint – a computerized presentation program are part of this course. Students learn to enter edit, filter, and generate reports on information stored in Access. Using PowerPoint, the students first learn computer presentation techniques. These techniques are then applied to specific research topics. Both computer and oral presentation skills are emphasized. Finally the integration of these applications to produce quality products is covered.

CURRICULUM WRITING TEAM:

Bernie Bieski Loretta Franceski Eric Greenberger

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Course: Computer Applications **Grade Level**: 9 & 10

Unit: Overview of Course PA Standards: 3.7.10.C

Management, Keyboarding, 3.7.10.E Hardware, Software and 3.7.12.C

Networking

Topics:	Skills:
Basic Hardware Software Packages Lab Network Lab Safety Course Expectations Keyboarding skills and techniques	Identify and utilize available hardware Understand the concept of an integrated software package Define basic topology and network operations Practice necessary policy for lab safety Become familiar with the course goals Apply touch keyboarding skills and techniques at a speed and accuracy of(to be filled in at a later date)
Activities:	Performance Assessments:
Handouts Discussion Visuals Keyboarding software	Question and answer forum Keyboarding timings

Course: Computer Applications **Grade Level:** 9 & 10

Unit: MS Word 2000 PA Standards: 3.7.10.C

3.7.10.D 3.7.12.C 3.7.12.D

Topics:	Skills:
Introducing the Word Processor	Define word processing Create, edit, save, close, open and print a Word document Use the assistant Use menus, toolbars, views and screen scrolls Spell and grammar check a document Show and understand formatting marks
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussion Note taking Practice exercises Review exercises	Notebook check Teacher-made quizzes Teacher-made tests Class work Class participation

Course: Computer Applications **Grade Level:** 9 & 10

Unit: MS Word 2000 PA Standards: 3.7.10.C

3.7.10.E 3.7.12.C

Topics:	Skills:
Formatting Documents	Print preview a document Reverse or repeat the effects of commands Apply character, paragraph, and page formats Add a header and footer to a document Insert page numbers and page breaks Position text using tabs and tab stops
Activities:	Performance Assessments:
Teacher-led demonstrations	Notebook check
Class discussion	Teacher-made quizzes
Note taking	Teacher-made test
Practice exercises	Class work
Review exercises	Class participation

Course: Computer Applications **Grade Level:** 9 & 10

Unit: MS Word 2000 PA Standards: 3.7.10.C

3.7.10.D 3.7.12.C 3.7.12.D

Topics:	Skills:
Word Processor Features	Copy and move highlighted blocks of text. Use the windows clipboard and the office clipboard Find and replace text using the appropriate commands Use the thesaurus Format indents Format bulleted and numbered lists Create and edit footnotes Apply basic desktop publishing techniques
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussion Note taking Practice exercises Review exercises Poster project	Notebook check Teacher-made quizzes Teacher-made test Class work Class participation

Course: Computer Applications **Grade Level:** 9 & 10

Unit: MS Word 2000 PA Standards: 3.7.10.C

3.7.10.D 3.7.10.E 3.7.12.C

Topics:	Skills:
Advanced Word Processor Features	Create and format a table structure Insert special characters Hyphenate a document Apply built-in styles Create sections in a document Create hyperlinks to the Internet and other files Create newsletters and labels Use the resume wizard Create a web page from word document
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussion Note taking Practice exercises Review exercises Resume exercise	Notebook check Teacher-made quizzes Teacher-made test Class work Class participation

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Microsoft Excel PA Standards: 3.7.10.C

Topics:	Skills:
Introduce spreadsheet concepts	Identify parts of a spreadsheet window Enter data, save and close a spreadsheet Save, close and print a spreadsheet Create headers and footers in a spreadsheet Format spreadsheet cells Use formulas to perform calculations Use cell references in formulas
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussions Practice exercises Budget assignment Review exercises	Teacher-made test Review questions Class work Class participation

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Microsoft Excel PA Standards: 3.7.10.C

Topics:	Skills:
Utilizing spreadsheet functions	Find and replace commands Copy, cut and paste commands Use the Minimum and Maximum commands Insert a function into a formula Absolute cell references Manipulating columns, rows and large spreadsheets Use the "IF" function
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussions Practice exercises Candy Lab (optional) Review exercises	Teacher-made test Review questions Class work Class participation

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Microsoft Excel PA Standards: 3.7.10.C

Topics:	Skills:
Using Worksheets and creating charts	Using multiple sheets Importing and exporting data between sheets Using cell references Creating, editing and printing charts and graphs
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussions Practice exercises Hurricane activity (optional) Review exercises	Teacher-made test Review questions Class work Class participation

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Microsoft Excel PA Standards: 3.7.10.C

Topics:	Skills:
Advanced spreadsheet techniques	Create What If models
	Sorting a spreadsheet
	Utilizing the Choose Function
	Freezing Cells
	Amortization tables
	Payment functions
Activities:	Performance Assessments:
Teacher-led demonstrations	Teacher-made test
Class discussions	Review questions
Practice exercises	Class work
Purchase a home assignment	Class participation
Review exercises	

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Microsoft Excel PA Standards: 3.7.10.C

Topics:	Skills:
Integrating the Word Processor and Spreadsheet	Working with multiple files Copying text and data between documents Working with multiple applications Copying a chart into a word document Creating hyperlinks to files Object Linking and Embedding
Activities:	Performance Assessments:
Teacher-led demonstrations Class discussions Practice exercises Purchase a home assignment Review exercises	Teacher-made test Review questions Class work Class participation

Course: Computer Applications **Grade Level:** 9-10

Unit: Microsoft Access PA Standards: 3.7.10.C

Topics:	Skills:
Introducing the Relational Database	Define Fields Design a Relational Database Create a New Relational Database Create a new Form Create a new Table Use Forms and Entering Records Format Datasheet View Print Records Filter Use Saved Filters Advanced Filtering
Activities:	Performance Assessments:
Class discussion Class notes Teacher-led demonstrations Practice exercises	Multiple Database Design and Applications Exam / Quiz Topic review questioning Written Description of necessary steps and exercises required to successfully design and manage a relational database

Course: Computer Applications **Grade Level:** 9-10

Unit: Microsoft Access PA Standards: 3.7.10.C

Topics:	Skills:
Relational Database Techniques	Modifying a Table Sorting Records Modifying a Record Defining Relationships Using Select Queries Modifying and Deleting a Select Query Sorting Select Query Results Range Queries Select Queries Involving AND Select Queries Involving OR
Activities:	Performance Assessments:
Class discussion Class notes Teacher-led demonstrations Practice exercises	Multiple Database Design and Applications Exam / Quiz Topic review questioning Written Description of necessary steps and
	exercises required to successfully design and manage a relational database

Course: Computer Applications **Grade Level:** 9-10

Unit: Microsoft Access PA Standards: 3.7.10.C

Skills:
Creating a Report
Report Summaries
Using Fields in Query Criteria
Calculation Fields
Performance Assessments:
Multiple Database Design and Applications
Exam / Quiz
Topic review questioning
Written Description of necessary steps and exercises required to successfully design and manage a relational database

Course: Computer Applications **Grade Level:** 9-10

Unit: Microsoft PowerPoint PA Standards: 3.7.10.C

Topics:	Skills:
Making Presentations with PowerPoint	Creating a New PowerPoint Presentation Power Point Views Displaying Slides Viewing a Presentation Editing Text Adding and Deleting Slides Adding Graphics to a Slide Changing the order of Slides Printing a Presentation Slide Transitions Adding a Chart from an Excel Spreadsheet Planning a Presentation Presentation Design Creating and Printing Speaker Notes
Activities:	Performance Assessments:
The student will plan, design, and present several PowerPoint presentations based on various scenarios. Class discussion Class notes Teacher-led demonstrations Practice exercises	Exam / Quiz Topic review questioning Written Description of necessary steps and exercises required to successfully plan, design, and present a PowerPoint Presentation

Course: Computer Applications **Grade Level**: Grade 9-10

Unit: Final Project PA Standards: 3.7.10.C

Topics:	Skills:
Integration of Word – PowerPoint – Access - Excel	Develop and construct a database Filter and Query a database Create database reports Design and construct a spreadsheet Utilize spreadsheet charts Perform a mail-merge Use Word to create business documents Develop a multimedia presentation to promote a business Import and export objects between software applications
Activities:	Performance Assessments:
Student research Class discussions Class work	Evaluation of student projects

Course Timeline & sequence of course delivery

Word	20 blocks
Excel	24 blocks
Access	22 blocks
PowerPoint	12 blocks
Final Project	8 blocks
Final Exam	4 blocks