**                   Computer Applications 2
                   SYLLABUS**

**INSTRUCTOR INFORMATION:**

Diane Stocker-Bendersky

**Office:** 734-994-2092

**Best Conference Times:** after 3:30 W-F

**Email:** stockerb@aaps.k12.mi.us

**Credit**

.5 Unit of credit per semester for class

**Earn College Credit:** *Articulation Agreement with Washtenaw Community College* **WCC**. Earn up to 2 college credit hours. Cost equal to approximately $87 a credit hour for in state student. 12 credits @ $87 = $174 saved!

**REQUIRED TEXT AND MATERIALS:**

Computer Applications –

Work Place Skills

Additional Materials found on Internet Sites

Various touch typing keyboard support programs.

Supplemental materials as developed by the instructor.

**SOFTWARE USED:**

Photo Editor, Paint
 Microsoft Office Suite (Word, Powerpoint, Excel, Access, Publisher)
 Microsoft Movie Maker

**MULTIMEDIA TOOLS:**

IBM Personal Computer, 10 Key calculator, Telecommunication (E-Mail, Internet)
Mavica and Cannon digital cameras, HP Scanner; Microsoft Word, Excel,
Photo Editor, Paint, PowerPoint, Microsoft Movie Maker; Roxio Easy CD & DVD Creator,
Sound Max, Video camera and microphone.

**COURSE RESOURCES:**

* Microsoft Office Suite (XP)
* Articles (handouts, online
* Websites
* Handouts

**MATERIALS REQUIRED:** Binder or notebook with paper, pen, highlighter, jump/USB drive (if you wish)

**COURSE DESCRIPTION:**

This course is designed for students who have successfully completed Computer Applications I and wish to to further refine the business skills and knowledge previously acquired.

Students will have an opportunity to gain the basic skills necessary for employment in any business-related environment. They will learn the techniques and receive training on equipment/software used in many businesses today.

Students will learn to use the computer for advanced word processing, database, desktop publishing, and other applications. Educational experiences will be based upon the student’s individual career and educational goals. The computer applications curriculum provides instruction in the use of current technology and computer applications with an emphasis on the integration and application of communication, employability, industry certification, math, and language arts skills.

Through classroom instruction, students will develop the knowledge and the skills necessary for success in the workplace and develop the competencies in administrative and office support tasks. Emphasis is placed on preparing students for the realistic problems and situations encountered in modern offices.

**Course Objectives**

Students who successfully complete this course will be able to:

1. Meet established objectives and locate resources in order to solve problems utilizing appropriate computer software
2. Demonstrate skill-based knowledge using business technology applications by selecting the most appropriate process to develop an end product using efficient keyboarding methods, correct formatting and proofreading techniques.
3. Interpret materials and resources pertinent to business technology applications by following verbal and/or written instructions
4. Use a constructive thought process and effective interpersonal communication skills when collaborating as a term member to solve business problems.
5. Understand computer hardware fundamentals.
6. Become comfortable with computer terminology.
7. Describe the differences between applications software and system software.
8. Create word processing documents and understand word processing fundamentals.
9. Use an electronic spreadsheet to solve problems.
10. Author simple data base systems and apply queries to search for a range of data.
11. Understand data communications and graphics functions through in class examples.
12. Become proficient in the use of mouse and windows environment.
13. Be able to access the World Wide Web feature using Netscape Navigator to navigate, search, and explore the Web. Some exposure to e-mail, newsgroups, multimedia, and other Internet resources.
14. Apply math computational and problem-solving skills in personal, business, and consumer applications
15. Use current technology and information processing concepts for personal and business applications
16. Produce business and personal presentations using multimedia technology

16.   Apply desktop publishing concepts and effective communication techniques to produce business and personal documents

17.   Explore and use telecommunications systems

18.   Produce various business documents using word processing concepts and procedures

**Course Prerequisites**Students should have basic computer skills; There are no prerequisites for this course.

 **INSTRUCTIONAL PHILOSOPHY:**

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, individual and group projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom.

It is our desire to make our classroom environment as close as possible to the work environment. At times it may seem that we are asking for more work than you can complete, but in order to achieve excellence, you must give maximum effort to your educational opportunities.

You will be expected to arrive on time each day, and completed given assignments and tasks each day, and set your own deadlines and manage your time effectively in order to turn in assignments and assessments by the posted due dates. These due dates may be revised during the course, just as tasks are re-prioritized on the job.

To that end, you might have to complete some of your work outside of class. The amount of time required outside of class will depend on the skills of each individual student.

**MAJOR COURSE PROJECT(s)**

Individual class assignments in Computer Applications to include a: Reading Assignments | Self-paced tutorials | Hands-on assignments | online assessments |

**COURSE OUTLINE**

**Getting to Know You.
1. Introduction slideshow**

**2. Creating files and folders for classwork**

**3. Why have a have a IT skills discussion?**

**4. Introduction to the workplace**

**1. Utilizing Software**

* 1. **Novell Network
	 1. Logging on
	2. Password**
	2. **Windows Operating System**
		+ 1. **Desktop**
			2. **Taskbar**
			3. **Start Button**
			4. **My computer**
			5. **Recycle bin**
			6. **Icons**
	3. **Standard Software Basics**
		+ 1. **Title bar**
			2. **Dialog box**
			3. **Minimize, maximize, close**
	4. **Web Browser**
		+ 1. **Screen parts**
				1. **Menu bar**
				2. **Status indicator**
				3. **Site map**
				4. **Progress/status bar**
			2. **Tool Bars**
				1. **Standard buttons**
				2. **Address bar**
				3. **Links**
	5. **File Maintenance**
		1. **Organizing files (tree structure)**
		2. **Folders**
		3. **Back-up files**
		4. **Finding Files**
		5. **Sorting by names, size, type, and date**
		6. **Renaming files**
	6. **Computer Terminology**
	7. **Identify a Computer System**
		1. **Microcomputer**
		2. **Parts of computer hardware**
		3. **Types of input/output devices**
	8. **Keyboarding
	 A. Technique
	 B. Touch Typing
	  1. Alphabetic keys
	          2.  Punctuation**            **a. Usage
	       b. Spacing
	 3. Service keys**  **a. Space bar
	       b. Shift keys
	  c. Tab keys
	 4. Numeric keypad
	 5. Figures
	 6. Symbols**
	9. **Word Processing**
		+ 1. **Basic word processing**
				1. **Create, save, close**
				2. **Open file, edit, save with a different name**
				3. **Printing**

**Preview**

**Dialog box**

* + - * 1. **Highlight/select**
				2. **Check Spelling/thesaurus**
				3. **Undo command**
				4. **Defaults**
			1. **Basic editing and formatting**
				1. **Page setup**
				2. **Move and copy text**
				3. **Font(s)**
				4. **Paragraph**
				5. **Bullets and numbering**
				6. **Headers/footers**
				7. **AutoCorrect**
			2. **Advanced formatting and editing**
				1. **Find and replace text**
				2. **Toolbars**

**Formatting**

**Drawing**

**Word Art**

**Clipboard**

* + - * 1. **Table feature**
	1. **Spreadsheets**
		+ 1. **Spreadsheet Basics**
				1. **Create, save, close**
				2. **Adjust columns widths and row heights**
				3. **Insert/delete columns and rows**
				4. **Printing**

**Preview**

**Dialog box**

* + - * 1. **Open a file and edit**
				2. **Copy a formula using fill down and right commands**
				3. **Freeze/unfreeze headings**

**Edit cells three ways**

* + - 1. **Formatting Spreadsheets**
				1. **Numbers**
				2. **Alignment**
				3. **Font**
				4. **Border**
				5. **Protection**
			2. **Advanced spreadsheet commands**
				1. **Functions**

**SUM**

**AVG**

**MAX, MIN**

**COUNT**

* + - * 1. **Absolute cell and mixed cell references**
			1. **Charts**
				1. **Creating using a wizard**
				2. **Insert Chart titles and category labels**
				3. **Define series**
				4. **Legend**
	1. **PowerPoint**
		+ 1. **Create a presentation**
				1. **Auto content Wizard**
				2. **Template**
				3. **Blank**
			2. **View buttons**
				1. **Normal**
				2. **Outline**
				3. **Slide**
				4. **Slide Sorter**
				5. **Slide Show**
			3. **Format**
				1. **Slide layout**
				2. **Background**
				3. **Apply design**
			4. **Slide show**
				1. **Animation**
				2. **Transition**
				3. **Timings**
				4. **Action buttons**

**Course Performance Objectives:**

**I.   Office Skills (keyboarding and 10 key skills**

 A. Keyboarding with speed and accuracy

 B. Ten key with speed and accuracy

**1. Computer Literacy -**The objective of a computer literacy component of a core curriculum is to enable the student to use computer tools, resources, and software effectively.

* 1. To understand terms and concepts as they apply to computer systems and computer software.
	2. To demonstrate skill using computers as a tool to research, retrieve, and share information.
	3. To demonstrate skill using word processing software to create and modify documents.
	4. To demonstrate skill using spreadsheet software to create and modify workbooks.
	5. To demonstrate skill using database management system software to create and modify databases.
	6. To demonstrate skill using presentation graphics software to create and modify presentations.

**2.  Computer Systems**

1. Identify terms and concepts as they apply to computer systems and computer software.
2. Use a computer to research, retrieve, and share information.
3. Create and modify documents using word processing software.
4. Create and modify workbooks using spreadsheet software.
5. Create and modify databases using database management system software.
6. Create and modify presentations using presentation graphics software.

 **3. Use Word Processing Application**

* + 1. Utilize word processing software to demonstrate professional writing skills by producing and editing business correspondence documents using various data input techniques.
			- 1. Utilize e-mail messages in accordance with established business standards.
				2. Demonstrate manuscript formatting styles in business and correspondence documents.
				3. Utilize wizards and templates in business and correspondence documents.

 1. Identify components of word processing application.

 2. Create, edit, save, print, close, and open word processing documents.

 3. Use editing and proofreading tools.

 4. Apply character, paragraph, and document formats.

 5. Create a MLA style report.

 6. View and modify document summary.

 7. Insert picture features in a document: Clip Art, Word Art, and from file items.

 8. Use header and footer features.

 9. Apply auto text features to document.

 10. Create, modify, and format tables.

 11. Format Word document as a Web page.

**4. Identify features of computer applications software.**

 1. Run applications software using graphical user interface.

 2. Explain the types and purposes of application software.

 3. Select the application software type appropriate for specific tasks.

 4. Use reference materials, such as on-line help, tutorials, and textbook materials.

 5. Identify, select, and apply features of application software products.

 6. Diagnose and solve applications software problems.

 5. **Database Applications**

Utilize advanced features of database software, including sorting, filtering, querying and merging data, and creating reports.

Organizing database content using formatting, editing, and records tools.

1. **Data Input Skills**
	1. Utilize advanced features of word processing software, including outlining, tracking changes, hyper linking, creating macros, developing forms, and mail merging.
2. **Internet Applications**
	1. Critique the Internet and digital information for validity, accuracy, bias, and current relevance.
	2. Create a product that integrates information from multiple software applications.

 B. Setting appropriate task priorities

**11.   Use Business Equipment**

A.   Telephone Skills

B. Calculator/Computer Keypad

1. **Ethics**
	1. Practice safe, ethical, and legal use of technology systems and digital content.
		* 1. Explain consequences of unsafe, illegal, and unethical use of technology systems and digital content.
			2. Interpreting copyright laws and policies with regard to ownership and use of digital content.
			3. Cite sources of digital content using a style manual
	2. Analyze cultural, social, economic, environmental, and political effects and trends of technology to access emerging technologies and forecast innovations.
		* 1. Recognizing the influence of digital media on audiences
			2. Identifying factors that affect access to technology
			3. Assessing the impact of networked technology systems on society
			4. Compare capabilities of various technologies to address personal, social, and lifelong learning and career needs
2. **Workplace Skills**
	1. Apply safe and healthy work standards in the workplace for procedures and conditions; tools, dress, and the use of technology; emergency procedures; and work area maintenance.
	2. Analyze the organizational structure of a business to determine roles and responsibilities of employees and functions of department or units.
	3. Demonstrate knowledge and skills gained through student organization activities to enhance leadership and teamwork.
	4. Demonstrate collaborative skills using curriculum-related content in digital environments.
	5. Create simulations using digital tools.
	6. Explain data encryption procedures.
	7. Utilize interactive models and digital sources to address real-world problems.
3. **Leadership**
	1. Demonstrate knowledge and skills gained through student organization activities to enhance leadership and teamwork.
4. **Financial Literacy**
	1. Critique various ways to become financially literate.
		* 1. Identify credit card use and misuse.
			2. Explain ways to avoid identity theft.
			3. Identify reasons for budgeting, saving, and investing.
			4. Compare rates of interest.
5. Determine how debt influences future employment and purchases.

**EXPECTED LEARNER OUTCOMES:**

Upon successful completion of Computer Applications, the student will be able to:

1. Load and exit windows; use mouse and keyboard; identify the components of the windows desktop; organize screen based desktop; switch tasks in a multi-tasking environment.
2. Start and exit Microsoft Word XP; open and close a document; delete and inset text and blank lines; select blocks of text; change justification and line spacing; save and print a document.
3. Spell-check a document; open and display two documents; cut, copy, and move text; enter date codes; set margins and tabs; bold and italicize text; search and replace text.
4. Start and exit Microsoft Excel XP; design a worksheet; enter labels and values; edit worksheet entries; open and close files; copy data, enter formulas, and align entries; save and print a worksheet.
5. Copy formulas, enter @functions, and clear cell contents; format values and use absolute references; change column widths, insert and delete rows and columns; move entries, change fonts and attributes; insert and use multiple worksheets.
6. Create bar, line, mixed, and pie charts; enter chart titles and axis titles; add tick marks, grid lines, and patterns; add test blocks and arrows; add legends and data labels; save and print a worksheet with charts.
7. Start and exit Microsoft PowerPoint XP; create a multi-level bulleted list presentation; select a design template; change font style; decrease font size; save a presentation; display slides in an electronic slide show; print copies of the slides to make overhead transparencies.
8. Use outline view and clip art to create an electronic slide show; change slide layouts; insert clip art; add slide transition effects; add text animation effects; animate clip art; run an animated slide show; and print audience handouts from an outline.
9. Start and exit Microsoft Access XP; create a database using design and datasheet views; create, save and close a table; add records to a table; preview and print the content of a table; use a form to view data; create a report; query a database using the select query window; create a new query; enter criteria; use compound criteria; sort data in a query; join tables; use calculated fields in a query.
10. Maintain a database using the design and update features of Access; add, change, and delete records; search for a record; filter records. change the structure; use a update query; use a delete query; create validation rules; specify referential integrity; order records on multiple fields; create and use indexes.
11. Define terms and concepts related to the Internet.
12. Use the Internet browser to access Web pages. Use search engines to locate information.
13. Set up an e-mail account. Send and receive e-mail.

##### **Performance Standards:**

##### **Information Technology and Major Business Functions:** Describe the information technology components of major business functions and explain their interrelationships.

##### **Input Technologies:** Use input technologies appropriately to enter and manipulate text and data.

##### **Information Retrieval:** Gather, evaluate, use, and cite information from information technology sources.

##### **Programming and Application Development:** Design, develop, test and implement programs.

##### **Privacy and Ethics:** Describe, analyze, develop, and follow policies for managing privacy and ethical issues in organizations and in a technology-based society.

##### **Information Technology Careers:** Describe positions and career paths in information technology.

**COURSE POLICIES**

**All school discipline and attendance policies well be followed.**

1. Attendance daily – if absent, please make arrangements to complete the missing work.
2. The student must make arrangements in a timely manner to make up missed exams. A "zero" will be recorded for grade reports until complete. Plagiarized work will receive a grade of “zero”.
3. Grades are weighted numerically per assignments:
	1. Textbook Quizzes / Tests ([www.quizlab.com](http://www.quizlab.com/) plus essay questions)
	2. Multimedia presentations (subjective assessment)
	3. Web pages and presentation of digital portfolio (subjective assessment)
	4. Graphics, edited photographs and animations
	5. Student self and peer evaluations. (detail quality assessment)
	6. Module Activities (computer tracked and recorded) and Post Tests (on class multimedia computers)
	7. *Optional grade* – organized notebook and journal with notes and homework .
	8. *Extra Credit* for creative application of concepts added to choice web page. Please have plans approved in advance. This may be a partner project depending on the complexity.

**Cheating/Plagiarism**

Students caught pilfering or turning in work other than their own will lose credit and there is a risk for all parties involved to not receive credit for a project. Your professionalism grade will also be a failing grade, an administrative referral may be required, and parents will be contacted.

**Computer Lab Policies**

Students are expected to take responsibility in helping to maintain a classroom environment that is conductive to learning. In order to assure that all students have the opportunity to gain from the time spent in class, students are prohibited from making offensive remarks, reading material not related to the class, sleeping, having cell phone conversations, beepers (not on vibrate) or engaging in any kind of distracting behavior. Inappropriate behavior in the classroom shall resultStudents are expected to take responsibility in helping to maintain a classroom environment that is conductive to learning. In order to assure that all students have the opportunity to gain from the time spent in class, students are prohibited from making offensive remarks, reading material not related to the class, sleeping, having cell phone on, cell phone conversations, beepers (not on vibrate) or engaging in any kind of distracting behavior. (See Huron’s electronic policy in Student Code of Conduct Handbook) Inappropriate behavior in the classroom shall result in warning then a consult with teacher, parent, and administrator.

Students are responsible for any deliberate damage done to the equipment in the lab including, but not limited to computer workstations, calculators, copiers, scanners, printers, and projectors. Please see the Computer Lab Rules for a complete list of responsibilities.

**Hours Required Out of Class**

Depending on the background and computer skills of the student, outside work, research, and practice may be necessary to complete an assignment. Lab time is available during the lunch hour or after school twice a week by appointment.

**Grading Breakout -** You will be evaluated by written and performance assessments throughout the course. Every four weeks and each marking period (quarter), your grade is computed using their daily points and the scores you have achieved on tests, quizzes, assignments and homework.

25% Daily Assignments

 5% Homework Assignments

20% Projects

10% Tests/Quizzes

10% Midterm Exam

20 % Final Exam

10% Professionalism/Attendance/Work habits

**Retake Policy:** Students will be requested to redo class assignments, projects, homework if it does meet employment standards. Projects may not be redone. Upon resubmission of student work, it will be re-graded. If grade is higher, the new grade will be entered into the gradebook. Students may retake quizzes and exams once only.

**Course Grading:**

Course Grades: <59=E, 60-69=D, 70-79=C, 80-89=B, 90-100=A