

<b>COMPUTER APPLICATIONS II - INDEPENDENT STUDY - FAIRVIEW HIGH SCHOOL - 2011-2012</b>
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## **1. Newsletter**

Complete a newsletter on a topic of your choice.

The following are specific requirements that must be included in your document:

1. Two or three columns.
2. Fill behind text and different font color.
3. A graphic.
4. Some bullets or numbering.
5. A section bordered and shaded.
6. A pull quote.
7. A drop cap.
8. An auto-shape with text inside.

An example is given below. Note: your newsletter may contain fewer words than the example. There is to be no copying and pasting from the Internet, use your own word. Choose a topic you enjoy.

# Creating a Newsletter

Volume I, Number 1

Fall 2003

**D**esktop publishing is easy, but there are several points to remember. This chapter will take you through the steps in creating a newsletter. The first hands-on exercise creates a simple newsletter with a masthead and three-column design. The second exercise creates a more attractive document by exploring different ways to emphasize the text.



## Clip Art and Other Objects

Clip art is available from a variety of sources. You can also use other types of objects such as maps, charts, or organization charts, which are created by other applications, then brought into a document through the Insert Object command. A single dominant graphic is usually more appealing than multiple smaller graphics.

## Techniques to Consider

Our finished newsletter contains one or more examples of each of the following desktop publishing techniques. Can you find where each technique is used, and further, explain, how to implement that technique in Microsoft Word?

1. Pull Quotes
2. Reverse
3. Drop Caps
4. Tables
5. Styles
6. Bullets and Numbering
7. Borders and Shading
8. The Drawing Toolbar

## Newspaper-Style Columns

The essence of a newsletter is the implementation of columns in which text flows continuously from the bottom of one column to the top of the next. You specify the number of columns, and optionally, the space between columns. Microsoft Word does the rest. It will compute the width of each column based on the number of columns and the margins.

Beginners often specify margins that are too large and implement too much space between the columns. Another way to achieve a more sophisticated look is to avoid the standard two-column design. You can implement columns of varying width and/or insert vertical lines between the columns.

The number of columns will vary in different parts of a document. The masthead is typically a single column, but the body of the newsletter will have two or three. Remember, too, that columns are implemented at the section level and hence, section breaks are required throughout a document.

## Typography

Typography is the process of selecting typefaces, type styles, and type sizes, and is a critical element in the success of any document. Type should reinforce the message and should be consistent with the information you want to convey. More is not better, especially in the case of too many typefaces and styles, which produce cluttered documents that impress no one. Try to limit yourself to a maximum of two typefaces per document, but choose multiple sizes and/or styles within those typefaces. Use boldface or italics for emphasis, but do so in moderation, because if you use too many different elements, the effect is lost.

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*A pull quote adds interest to a document while simultaneously emphasizing a key point. It is implemented by increasing the point size, changing to italics, centering the text, and displaying a top and bottom border on the paragraph.*

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## Use Styles as Appropriate

Styles were covered in the previous chapter, but that does not mean you cannot use them in conjunction with a newsletter. A style stores character and/or paragraph formatting and can be applied to multiple occurrences of the same element within a document. Change the style and you automatically change all text defined by that style. You can also use styles from one edition of your newsletter to the next to insure consistency.

## Borders and Shading

Borders and shading are effective individually or in combination with one another. Use a thin rule (one point or less) and light shading (five or ten percent) for best results. The techniques are especially useful in the absence of clip art or other graphics and are a favorite of desktop publishers.

*All the News that Fits*

## 2. Polling/Presentation website

Create a poll on [www.polleverywhere.com](http://www.polleverywhere.com) (or other similar site) and administer poll when presenting work.

## 3. Car Payment Calculator (Excel)

1. Find a car of your choice online and its price.
2. Complete a car payment calculator using a financial function where the user inputs all of the information needed.
3. Include an interest paid cell.
4. Use validation where the user types in data and protect the formulas so they cannot be erased.

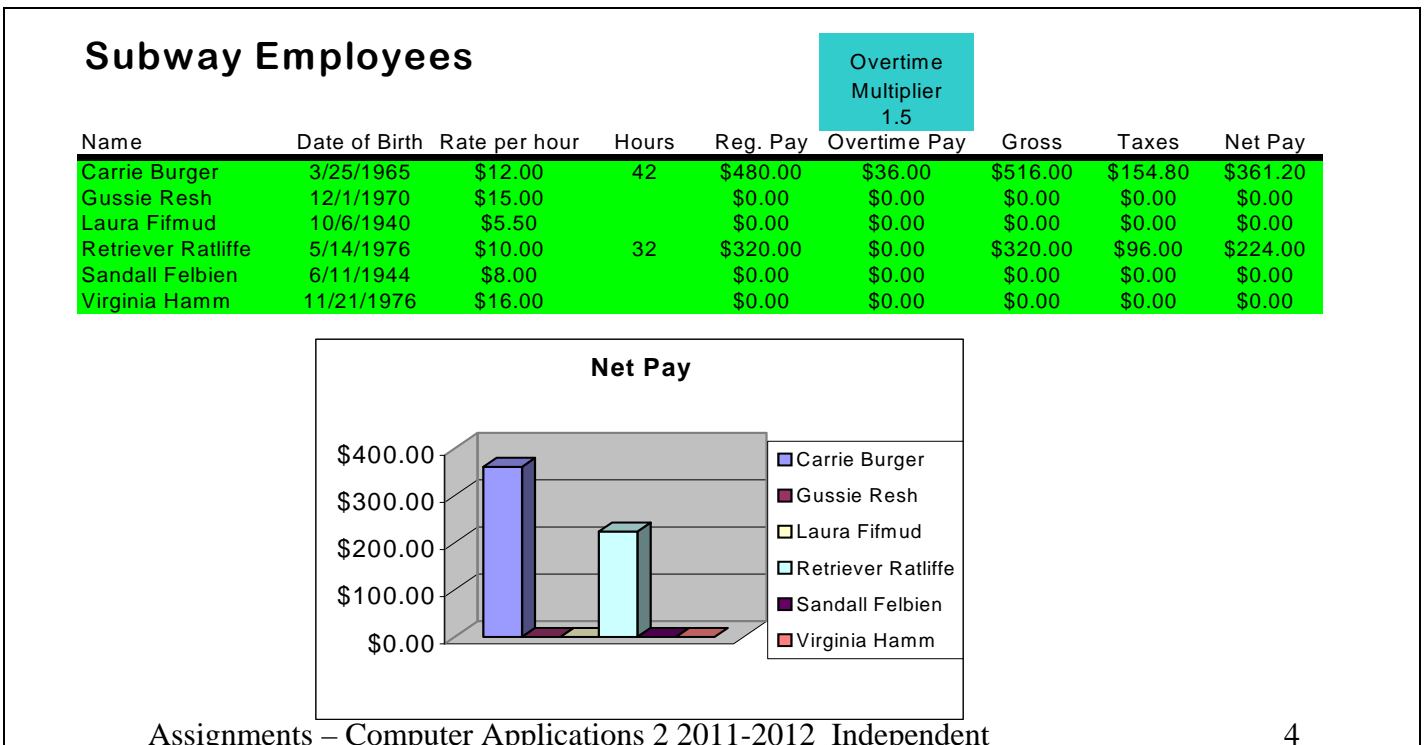
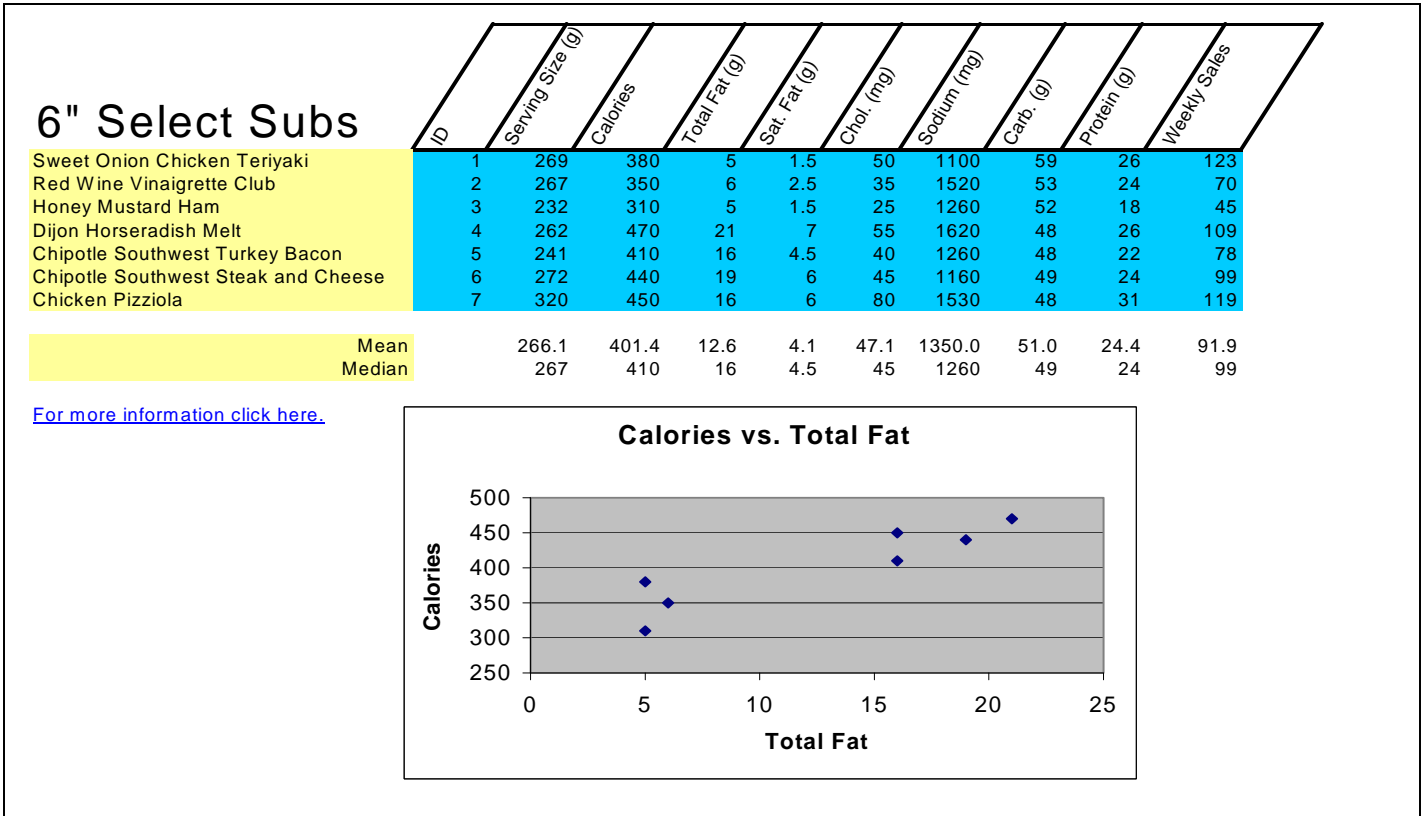
Car Payment Calculator				
	Plan 1	Plan 2		
Price of Vehicle	\$35,000.00	\$19,900.00		
Interest Rate (APR)	6.9%	6.9%		
Number of Months	60	48		
Monthly Payment	\$940.97	\$613.01	\$327.96	Difference
Total You Pay When Done	\$56,458.24	\$29,424.52	\$27,033.72	Difference

## 4. Temperatures (Excel)

1. Use at least 40 cities.
2. Type in yesterday's temps from the newspaper or Internet.
3. Assign a Red-Yellow-Blue color scale (conditional formatting) for all temps.
4. Using CountIf, count the number of temps above 60.
5. Using AverageIf, find the mean temp of all the temps below 60.

## 5. Subway (Excel)

Create a two-sheet spreadsheet as close as possible to the examples below. Use formulas or functions for the following categories: mean, median, regular pay, overtime pay, gross, taxes (6%), and net pay. IF functions are required for regular and overtime pay.



## 6. Data Analysis spreadsheet with PowerPoint summary

1. Put the data below into excel.
3. Create a scatter plot of the data. Adjust the scales if necessary.
4. Go to <http://www.ferrismath.com/stats/tutorials/InterpretingScatterplots2.ppt> and read about interpreting scatter plots.
5. Create a short PowerPoint that includes your topic, scatter plot and interpretation (are the variables associated?, how strongly?). Add your own thoughts about the association of the two variables.

What is your GPA?	How many days did you miss school last year?	What is your GPA?	How many days did you miss school last year?
4.25	2	4	2
4.4	4	4.25	3
4	5	3.2	17
3.4	5	4.5	10
4	2	3.8	5
3.5	5	4.33	3
4.35	4	4.5	10
3.825	16	4	0
4.375	1	2.8	4
4.6	10	3.8	0
3	20	3.9	2
3	30	3.75	10
3	5	4.5	4
4.375	10	3	10
3.75	14	3.75	3
4.2	7	3.8	5
3.5	9	3.45	10
3.873	10.5	4.1	3
4	25	3.8	0
4.4	0	3.65	8
3.75	5	3.92	15
4.5	7	4.75	7
4.2	0		
4.2	2		
2.8	27		
4	6		
2.9	14		
3.9	10		
4.33	3		

## 7. Career Cruising Introduction

1. Familiarize yourself with the website [www.careercruising.com](http://www.careercruising.com)

The username is fairview and the password is tigers.

2. Follow the steps and fill out information to create a new portfolio. Save all of your work (inventories, careers, schools) to the portfolio and upload all documents here.

## 8. Careers #1

1. Carefully and thoughtfully complete the Career MatchMaker (first 39 questions). Analyze your career results.
2. Complete the next set of questions to further narrow your career matches. Save these in your portfolio.
4. Read about your top ten careers and in a Word document record likes and dislikes for each of your top ten (a few sentences for each like/dislike).
5. Identify one career on your top ten list that you would have never chosen yourself and list the interests that landed the job on your top ten.
6. Identify a career that you may have wanted that did not appear on your top 20 and list why it did not appear based on your answers.

\*Clearly label all parts above.

## 9. Careers #2

1. Thoughtfully complete the my skills assessment.
2. Save the results to your portfolio.
3. Read through the careers that you did not already research from your Matchmaker results that received at least a B grade from the skills survey (get at least 3 new ones). For all careers make sure you read and/or listen to at least one of the interviews, the Day in the Life section and the Activities they do daily.
4. In your Word document that you have already created, add these new careers along with your likes and dislikes of these careers.

5. Research any one other career **of your choice** and add likes/dislikes to the Word document. After this you should have a total of 14 careers with likes/dislikes.

5. Narrow down your career choices to your top 4. Find the best link, under **Other Resources**, in each of those four careers and create that link in your portfolio. You will have to truly explore each link to determine the best link.

6. In your same word document, list your top 4 careers along with the website link you chose. Describe, for each of the 4 careers, how information on that website may have influenced your career decision either way.

## **10. College Search**

1. Now it is time to search and explore colleges.

2. Go to Career Cruising, Schools, School Selector. Thoughtfully answer all the questions about schools. You will get to a section asking for your major. You must know the program or major of your selected career. You may put in 2-3 majors if you are not sure which one you will choose yet.

3. The results should give you a manageable number of schools to explore (somewhere between 5 and 25). You will now read all about these schools trying to find which ones would best suit you. You must also explore the official website.

4. In a new Word document list your top 6 schools with the following information for each school:

- a. likes/dislikes
- b. something significant you learned from the school website.

5. Now use Google Earth to investigate the campuses. Get a screenshot of the campus and put a place mark there. Find a distance or two from places of interest, check for 3D buildings and check traffic. Summarize these things in your Word document for at least 3 of your top 6 colleges.

## 11. College Database using Microsoft Access

You should have 6 schools chosen in your portfolio before you begin this.

1. Create a database for your schools in Access by first designing the fields. Make sure you save it to a drive that will be available as Access makes you save before you start.
2. Enter all of the fields below into your database with the appropriate data types.
3. Enter all of the data for your top 6 colleges. Use the feature in parentheses next to certain fields. The categories for the lookup fields can be found in career cruising.
4. Create a basic **form** for each school.

College Name

City

State

Phone # (input mask)

Setting (lookup field)

Public? (Yes/No)

Size of School (lookup)

Faculty : Student Ratio (input mask)

Acceptance Difficulty (Lookup field)

Tuition

Official Website (hyperlink)

SAT scores (choose a subject, a certain range and list a **percent**)

Likes/Dislikes (memo field)

Picture (OLE Object) – best to paste the pictures into the Form of each school

Also include:

1. A command button on the form linking to CareerCruising website
2. special effects on some form fields

## **12. Financial Aid**

1. Read the article Financial Aid 101 (up to page 20).
2. Complete the Scholarship Selector in CareerCruising. Save results to your portfolio. Sort the scholarships by Amount. Search through the list finding at least 10 that may apply to you.
3. Create a brochure or Prezi summarizing the article, making sure, among other things, you address scholarships, grants, loans, FAFSA, EFC, and the financial aid calendar.
4. Add to your report in Word the scholarships and grants that may be possible for you (including local ones) with a brief description of each.

### 13. Movie Project

**Goals and Objectives** – Students will gain knowledge and experience with planning, shooting and finishing a movie using Windows Movie Maker.

**Materials** – Digital video camcorder (your own or one borrowed from school). **If using Movie Maker you must use a camcorder that uses a miniDV tape, only these are compatible with Movie Maker. The school can lend you one of these cameras.**

**Movie Theme Ideas:** Documentary/Informational, Short Story (humor, drama, horror, etc), First Person, Unsuspecting Subjects (candid camera), Music Video, Family/Highlights, Instructional Video (sports, musical instrument, craft, hobby, etc.)  
\*\* You may choose to create a movie based on your career/college senior project also.

#### **Activities -**

1. Recruit others, if necessary, to be part of your movie.
2. Read tips on shooting movies do's and don'ts below.
3. Decide upon your theme and create a storyboard (think now about your audio and special effects).
4. Plan the video shooting (who, what, where, when, how, materials, etc.)
5. Shoot video.
6. Capture into computer, piece together and create product. More recording may be needed.

**Outcomes** - Create a 5-10 minute, well-produced video with layered audio, transitions and appropriate special effects.

**Assessment** – Length: 5-10 minutes (30 points)

Quality: different camera angles, less zooming, steady camera, lighting, etc. (40 points)

Audio: volumes, added music or voice, appropriate, adds to movie (30 points)

Transitions: adds to movie, enough but not over done (15 points)

Special Effects: adds to movie, appropriate places, enough but not over done (25 points)

Good Movie?: does it achieve its purpose, is it interesting, were you creative, does it hold audience attention (60 points)

## Tips for Shooting Video

### (Important to follow these, will help your production quality)

Making great movies takes more than cameras, tripods, editing equipment, etc., of course. First you need the right raw material. Some advance planning will help ensure that you have the money shots. And following some basic videography techniques will make for more-professional results.

*Planning* means "developing an outline"--in Hollywood parlance, a *storyboard*--that lists the shots you'll need in order to tell your tale. Professional moviemakers storyboard every scene and camera angle. You don't have to go that far, but you will tell a better story if you plan some shots.

Consider starting with an *establishing shot* that clues viewers in on where your story takes place: for example, a shot of the swimming pool (see the examples on the right). To show the big picture, zoom out to your camcorder's wide-angle setting.

From there, you might cut to a *medium shot* that introduces your movie's subject: little Bobby preparing to belly flop off the diving board. Next, you might *cut away* to Mary tossing the ball. Cut back to Bobby, and then finish with a *long shot* of the entire scene.

And remember, you don't have to shoot every scene in chronological order--sequencing your shots is what editing is for. For example, shoot Mary's throw any time you like and edit it later into the proper sequence.

Also keep in mind that your subjects should move, not your camera. Nausea-inducing camera work is a common flaw of amateur videos. Too many people mistake a video camera for a fire hose: they sweep across a scene, panning left and right and back again. This technique is frequently called the "headache pan." Or they ceaselessly zoom in and zoom out, making viewers wonder whether they're coming or going.

A better practice is to stop recording, move to a different location or change your zoom setting, and then resume. Varied camera angles and zoom settings makes for a more interesting video. If you must pan--perhaps to capture a dramatic vista--do it slowly and steadily.

Another trick to shooting a panning shot is to follow some action, e.g., follow Billy walking around the pool to establish the scene, rather than panning around the pool area without any action.

Vary shot lengths. Your movie will be more engaging visually if you do. Use longer shots for complex scenes, such as a wide shot of a city street, and shorter shots for close-ups or reaction shots.

As a summary:

#### The Seven Deadly Camcorder Sins

1. Headhunting--placing every subject in the center of your frame.
2. Motorzooming--overuse of on-screen zooms.
3. Rooting--staying in one spot instead of looking for interesting angles.
4. Firehosing--panning all over the scene.
5. Upstanding--shooting everything from standing eye-level.
6. Snapshotting--taping only two or three seconds per shot.
7. Backlighting--too much light falling on the background instead of on the subject.

### **IMPORTANT NOTE**

Be aware that we will not permit students to submit finished projects that too closely resemble another students' work. Doing so could result in lowered scores or not being given credit for the project in question. There will also be a summer session in which students will need to come to the school and exhibit knowledge of the skills with the teacher. The date, time, and specific tasks for this will be announced.