The
Gigabyte Gazette

The Monthly Newsletter

of the

Sun City Summerlin Computer Club

April 2014

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President's Message

by Howard Verne

Dear Computer Club and friends

Remember to mark your calendars for the 1st Thursday of every month (April 3rd) for our 7 PM Computer Club meeting at Desert Vista.

Those of you who have computers with Windows XP have been getting reminders that Microsoft will cease support (i.e. monthly patches/fixes) after April 8th. If you are considering buying a new computer, be aware, it will probably come with Windows 8. If you wish, you can bring your new computer to the Tues afternoon HW SIG and we can set it up so it looks more like the desktop you are used to.

In addition, don't forget that Bill Wilkinson will be having Win 8 tutorial sessions the first and third Saturday at 10:30 AM. See the club site, http://www.scs-cc.com/ for more information.

Howard Verne, President
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Issue Contributors

Irene Burt	Tom Burt	Zane Clark
Stu Gershon	Kathy Kirby	David Kretchmar
Pat Lemay		Howard Verne

Submissions Welcome

We are always looking for new information to share with our club members. If you have computer or technical information you would like to share with members of the club, send your articles to Tom Burt at tomburt89134@cox.net. Thank you to everyone for your contributions.

SCSCC Board of Directors Actions

The Computer Club Board of Directors took the following actions on March 12, 2014

Edith Einhorn made a motion that the minutes of the February 12, 2014 Board of Director's Meeting be approved. The motion was seconded by Chuck Wolff and unanimously approved by the Board.

Tom Burt made a motion that the Lab Coordinator be authorized to spend $900 on a 1080P projector. The motion was seconded by George Lobue and unanimously approved by the Board.

George Lobue made a motion to adjourn the meeting. The motion was seconded by Chuck Wolff and the meeting was adjourned at 10:03 AM.

General Membership Meeting

The April general meeting will be held at 7 PM on Thursday, April 3rd at Desert Vista. We will have a presentation by a representative from CenturyLink covering their latest network and digital TV offerings. Come join us for this informational presentation, refreshments and fellowship. Come join us for this informational presentation, refreshments and fellowship.

Welcome New Members

The following new members joined the Computer Club between February 24th and March 26th.

Susan Allton	Theresa Martinez
Duane Baldwin	Bob Mc Mahon
Marinell Barber	Johnnye Milligan
Christine Bauman	Connie Morris
Thomas Borski	Charlotte O'Donnell
Charmaine Endres	Inday Ortiz
Al Greiten	Michael Sander
Laszlo Heredy	Ronnie Sander
Rozi Heredy	Don Scheid
Judith Jablan	Audrey J. Smith

April 2014 Calendars

To view the April classroom and lab calendars, click the following hyperlink:
http://www.scs-cc.com/Calendars/scscc_calendar_2014-04apr.pdf

Special Interest Groups

Special Interest Groups (SIGs) provide a forum for general discussion on a specific computer related subject. Admission to all SIGs is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. All of the following meetings are held in the Classroom <W> or <M> or <H> indicate whether a SIG would be of interest to a Windows, Macintosh or Hand-held Device (i-thing or Android) user.

Genealogy <W>
2nd Thursday, 10:00 a.m.
Karen Ristic (749-6489)
Genealogy is one of America's most popular and rewarding hobbies. Come; let us help you find your ancestors on the Internet. We will explore helpful, free, sites and assist you in building your family tree.

Internet Investing <W/M>
3rd Thursday, 9:00 a.m. in even months
Tom Burt (341-7095)
The Internet Investing SIG provides a forum for members interested in using Internet resources for researching and managing investments to meet, discuss, and learn more about the topic. The SIG's target audience is members with intermediate computer skills and investment experience, but all members are welcome.

GMail and Other Google Programs <W/M>
1st Thursday, 10:00 a.m.
Pat Lemay (254-1499)
This SIG covers Gmail as well as other Google applications. All members are welcome. This is your place to learn about all things Google.

iPad SIG <iPod, iPhone, iPad>
4th Thursday, 10 a.m.
Zane Clark (562-3684)
This SIG will be your forum for learning about and discussing the Apple iPhone, iPod and iPad tablet devices. It's for Apple hand-held device owners of all experience levels.

Hardware / Software Repair Lab <W >
Every Tuesday, 1:00 p.m. to 4:00 p.m.
Chuck Wolff (233-6634) and
George Lobue (256-0822)
The Repair Lab provides **CLUB MEMBERS ONLY** with no cost assistance for those having upgrades and / or hardware and software problems with their computers. Bring in only your PC tower and your problems. Our TECH team will give you our best effort. *Be sure to mark your cables so you can re-connect when you get home*.

Macintosh Users' Group <M/H>
2nd and 4th Tuesday, 6:30 p.m.
Ed Barkin (243-6597) and
Rose Mary D'Aloisio (255-2813)
This SIG is for Macintosh users of all experience levels. We will have Q&A, so bring your questions and/or problems.

Photoshop <W>

2nd and 4th Wednesdays, 6:30 p.m.
Un-moderated discussion group
This SIG covers many of the basic elements found in both Adobe Photoshop and Adobe Photoshop Elements, two excellent tools to get professional-quality results. If you wish to enhance your photographs, this SIG will be most helpful and of great value. This SIG's target audience is intermediate to advanced digital imaging users, but all members are welcome.

Picasa <W>

3rd Mondays, 1:00 p.m.
Stu Gershon (255-3309)
Stu will be conducting this SIG as a monthly workshop, using Picasa 3 as the tool for organizing and editing digital photos. This SIG's target audience is beginner to intermediate digital photography users, but all members are welcome.

Kaffee Klatches

Kaffee Klatches provide a forum for general discussion on all computer-related subjects. Admission to all Kaffee Klatches is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. All of the following meetings are held in the Classroom.

Beginners Kaffee Klatch <W/M>
First and Third Saturdays, 9:00 a.m.
Bill Wilkinson (233-4977)

If you are a novice or near-beginner computer user, or if you just want some refresher information together with a refreshing cup of coffee, then jump-start or recharge your computing knowledge by attending the BKK sessions. At each session, attendees will explore from one to four topics of particular interest to beginners and near-beginners. The topics are always announced a couple of days in advance via e-mail to SCSCC members who have subscribed to the club's message board. Each topic is presented in a step-by-step manner and is supported by "how to" notes that can be easily and conveniently downloaded from the BKK web page. Following each "up front" presentation of one or more topics (approximately 60 minutes in duration), an informal open-ended Question and Answer period takes place for those who wish to participate, listen, reflect, or inquire.

Kaffee Klatch <W/M/H>
Every Tuesday, 8:30 a.m.
Sandy Mintz (838-2525)

This KK is for all users from beginning to advanced. The KK discussions are not restricted to any one subject, computer platform or computer-knowledge level but should be computer or technology related. We will try to answer your questions, help you keep your systems updated and provide some useful "tips and tricks." If you have a tip or information you would like to share, we encourage you to bring it in and share since the SCSCC is built on "neighbor helping neighbor." The fellowship is great, the coffee is good, and the education received from the KK attendees is priceless. Stop by on Tuesday morning and have a cup of coffee with us.

Windows 8 Tutorial <W>
First and Third Saturdays at 10:30 am
Tutor: Bill Wilkinson

Each session will be devoted to assisting new Windows 8 owners in becoming familiar and comfortable with Microsoft's newest operating system for desktop and laptop computers. Assistance will be given individually or in small groups as circumstances warrant. Bill's notes are available by clicking HERE.

April 2014 Classes

Because there are a limited number of computer stations available for hands-on participation, pre-registration is necessary for all classes. See individual class descriptions for details on how to register.

BOOT CAMP CLASSES

April 21, 22, 24, 28, and 29
(Fully subscribed)

Lead instructor: Bill Wilkinson

If you know of friends in the Sun City Summerlin community who may be interested in taking this class (see the following course description), would you let them know that this program is available?

Boot Camp Course Description:

Boot Camp is an introductory course designed for residents who are new to computing and/or the Microsoft Windows operating system. **It also serves as an excellent review for intermediate users who want to fill some gaps in their computer knowledge.**

This hands-on class has a **limited enrollment of 12** with each participant working at an individual computer station in the Computer Lab. A multi-member team of lead instructor and three coaches will provide step-by-step instruction that will include demonstrations, guided practice and individual coaching assistance.

Participants will be introduced to the basic vocabulary and concepts necessary to establish an understanding of Windows. They will be instructed in practical techniques for managing and organizing their own data files, will be introduced to important strategies for working successfully with word processing documents, email, and the Internet, and will learn how to read and write data from and to a portable flash drive. Those participants who own a digital camera will be invited to actively participate in a hands-on experience of copying photos from their camera to their provided thumb drive, utilizing their newly acquired skills of file management.

Boot Camp Registration Details:

To seek additional information or to register for the class, please telephone **Bill Wilkinson at 233-4977.** He will register you for the **August** class and collect the course fee by mail.

Prerequisites: Must be a 2014 Club member (currently $5 membership dues) and own a computer with the Microsoft **WINDOWS XP, WINDOWS VISTA**, **WINDOWS 7, OR WINDOWS 8** operating system installed.

Course Fee: Fifteen dollars ($15.00); materials include a 159-page participant's manual specifically written for Sun City Summerlin residents, and a portable flash drive. **Make check payable to "SCSCC".**

WINDOWS 8/8.1 CLASS

Conquering the Basics and Beyond
MAKING AN EASY TRANSITION FROM
EARLIER EDITIONS OF WINDOWS

April 7, 8, 10 - 9 am to noon
(Fully subscribed)

This course includes over 150 "how-to" activities contained within a 100-page participant's manual that has been designed specifically for club members who have already moved to the Windows 8 operating system **or** who anticipate moving up from Windows XP or Vista in the near future.

The 9-hour **hands-on** class will be held over three days with each registered participant using one of the twelve Windows 8 computers in the lab.

Prerequisites: Some previous experience in using one of Microsoft's earlier operating systems, current 2014 Membership in the Computer Club (or $10 for a 2014 membership through December 31, 2014).

Program fee: $10 (which includes a participant's notebook). Make check payable to "SCSCC".

Lead Instructor: Bill Wilkinson, supported by 4-6 coaches

To register or obtain further details about the class, contact:

Bill Wilkinson at 233-4977

April 2014 Seminars

For Computer Club seminars, there is no requirement for advanced registration unless explicitly stated. Seating is first-come, first-seated.

Chromebook

Wednesday April 2nd, 1:00 pm
Presenter: Howard Verne
Location: Classroom

I have Windows XP and Microsoft won't support it anymore!

I just surf the web and read my email, why do I need an expensive computer?

Windows is too complicated, I don't understand this file and folder stuff

I plan on buying a new computer – but I don't want windows 8!

I am scared of all these viruses – isn't there a computer which is not so susceptible?

I don't want to back up my data – but I would like to see it down for me

I want a light, easy to use, laptop for $200-$300?

If you answered yes to any of these, maybe you should learn more about ChromeBooks!!?

Any other questions re Chromebooks? … then come to the seminar.

Introduction to Digital Photography

Monday, April 7th at 1 PM
Presenter: Stu Gershon
Location: Classroom

Almost everyone has a digital camera - let me show you some of the aspects of this wonderful hobby!

Handout:

http://digitaldoconline.com/Introduction%20to%20Digital%20Photography%20HANDOUT.htm

Laptop Workshop

Monday, April 14th at 1 PM
Presenter: Stu Gershon
Location: Classroom

If you have a laptop, I'll show you some of the ins and outs of operating your computer.

HANDOUT: http://digitaldoconline.com/Organize.htm

Getting Started with Android

Location: Computer Classroom
Wednesday April 16th at 1 PM Q&A Session
Wednesday April 23rd at 1 PM Part 3
Presenter: Glenn Latta

Android is the most popular mobile operating system in the World. A recent survey by IDC found that it's global market share is now 78.6%, versus 15.2% for iOS, 3.3% for Windows, 1.9% for Blackberry, and 1.0% for all others. Smartphones represent 79% of the mobile market place, while tablets are at 17%, and the balance are hybrids. Samsung dominates the Android market at 55% of all devices sold.

Perhaps you are a new Android tablet or smartphone user and would like to learn more about your device and the amazing things it can do besides make phone calls and read email. This seminar is for you. More experienced users are also encouraged to attend to share in the discussion.

In this seminar we will present 5 things to do first, discuss popular apps to get you started, demonstrate how to watch free movies on the device, and have a question and answer opportunity.

The handouts for the seminars are located at:
http://www.scs-cc.com/smnr/Getting_Started_With_Android_part1.pdf
http://www.scs-cc.com/smnr/Getting_Started_With_Android_Part2.pdf

Creating Documents and Spreadsheets in Google Drive

Thursday, April 17th at 1 PM
Presenter: Pat Lemay
Location: SCSCC Classroom

Google Drive lets you store and access your files anywhere – on the web, on your hard drive or on the go. Create data in Google Drive or upload it from your computer and your files go anywhere you do. Once your data is on Google Drive you have access on any of your devices with an Internet connection. Google gives you 5GB of free storage, but anything created or uploaded into Google's format is not counted against your 5GB of storage, so you virtually have unlimited free storage.

Adobe Photoshop Elements 10 Sampler

Monday, April 28th at 1 PM
Presenter: Stu Gershon
Location: SCSCC Classroom

Join Stu in exploring the many features of the Adobe Photoshop Elements 10 photo editing program.

Introduction to Excel 2010

Wednesday, April 30, 9 am to 11:00 am
Location: SCSCC Classroom
Presenter: Tom Burt

This 2 hour seminar will introduce you to some the features of the Microsoft Excel 2010 spreadsheet program. Most of this material also applies to Excel 2013 / 365. You will learn the basic terminology of Excel spreadsheets and workbooks, how to set up a simple spreadsheet, how to enter data into a sheet, how to create and work with formulas and how to save a workbook. After getting our feet on the ground, we will also cover two simple example applications: "Home Financial Analysis" and "Contact List". We'll also save time for your specific MS Excel questions.

The updated handout will be in the www.scs-cc.com/smnr area about April 15th.

Welcome to the Computer Club: New and Returning Members Orientation

Wednesday, April 30, 2014 at 1 pm
Presenter: Edith Einhorn
Location: Classroom

This session is designed to introduce new members to the many benefits that are available to them as participants in the Sun City Summerlin Computer Club (and to remind returning members of the benefits). We will provide you with an overview of our Website, our monthly online newsletter (the Gigabyte Gazette), our electronic bulletin board, our Kaffee klatches, Special Interest Groups (SIGs), repair service and our classes, seminars, and monthly meetings. In addition, we will show you how to gain access to our exclusive chat line for computer issues (Helpinghandsonline) and our club announcement line (SCSCC_News). We will provide a physical survey of the equipment that is available for use in our lab facility and show you how you can use our library of instructional books, manuals, compact disks, and video tapes. Last, but not least, we will respond to any questions that you may have about any aspect of your Club.

Tom's Tech-Notes

Speed up Your Computer with a Solid State Drive
Tom Burt, SCSCC Vice-President

Solid State Drives (SSDs) have been around for several years now. Prices have come down while capacities and performance have gone up. As a result, adding a SSD to an existing system has gone from being a luxury to a practical way to significantly increase the performance of a desktop or laptop.

The vast majority of SSDs are sold as 2.5 inch drives with a SATA controller and power supply. These drives look to PC hardware and software just like a regular hard disk drive. Most SSDs are rated as SATA III, which can deliver data between the drive and the motherboard at 6 billion bits per second.

SSD capacities have grown from 32 GB to 64GB a few years ago to 120 to 256 GB today. I have even seen SSDs for sale with capacities up to 1 TB, though these cost a lot. Sequential read / write speeds are now up in the range of 500 Megabytes per second for top-line drives. For random I/O, high end drives are rated at up to 100,000 input/output operations per second. This makes SSDs 20 to 30 times faster than hard disk drives. What makes the big performance difference in SSDs is that they can access a block of data anywhere in the drive's memory instantly. By contrast, a hard disk drive must position the read / write heads to the correct track and then wait for desired block to rotate under the heads. This access time can take up to 10 milliseconds or more – easily 10,000 times longer than the SSD.

Upgrading a PC to use a SSD can take either of two routes: one is to add the SSD to an existing desktop PC while keeping the PC's original hard drive installed; the second is to replace the PC's hard drive with a SSD. For most laptops, the second approach is the only practical one; there isn't room in the laptop for two drives. For desktops, the first approach may be more satisfactory, since it combines high performance while not forsaking high storage capacity. You can use the SSD to store the operating system, applications and very frequently accessed data files and then use the much larger hard disk drive to store all your other documents, photos, music, videos and such.

In upgrading to a SSD, you will need to consider whether to reinstall your operating system (Windows, Mac OS, possibly Linux) and applications from scratch or to attempt to copy your existing system to the SSD. If you wish to copy your existing hard drive's system, you will need an imaging or cloning tool such as Acronis True Image or Casper. The challenge is to get the size of your operating system's hard disk partition to be no larger than the size of your new SSD. There are many complications related to this and details are beyond the scope of this article. You might want to stop by our Tuesday hardware / Software repair lab and get some advice before diving into a SSD upgrade.

If you're now convinced a SSD is the way to go, what's the best size and make to buy? Low end drives are often on sale for about 50 cents per gigabyte. These drives are OK, but may not be as fast as the top end drives. Higher end drives are selling for about 60 cents per gigabyte. The Samsung EVO series drives get very high ratings and have some of the best performance specs at very good prices. Other brands are good also, but read the recent reviews carefully. Some vendors got good initial reviews on their drives and then switched to cheaper, slower chips. Check the usual online stores (Amazon.com, NewEgg.com, TigerDirect.com) and watch for sales. At current prices, a 250 gigabyte drive is very attractive, since you will most likely not run into capacity issues.

Digital Photography Column

By Stu Gershon

Summer Photos
(This column first appeared in May 2012)

With summer around the corner, many of you will be taking many photos as you travel or tour. Here are some of the most important rules for taking good photos:

1. **Shoot Wide** – Many of you like to get "up close and personal" with the subjects of your photos. You often fill the viewfinder or LCD screen with a face. In digital photography, whether you are using a basic program like Picasa, and intermediate program like Elements, or an advanced program like Photoshop, you always have the opportunity to "zoom in" (get closer) AFTER you take the photo. If you do it WHEN you take the photo, you often lose "Depth of Field" because your camera is focused on the nose of the subject which will cause distortion to the ears and the hair and the rest of the photo. If you are a little further back, everything in the frame should be in focus. I call this "shooting wide" because to take a better photo, your subject should be about 1/3rd to 1/6th of the entire picture. Also, if you are too close, the light from your flash does not have an opportunity to disperse evenly and you will wind up with "hot spots" and dark spots – uneven light. "Shooting Wide" will give you a better photo.

2. **Light behind** – in any photo, the light should be coming from behind you and towards the subject. This will give you better lighting, fewer shadows, and NO silhouettes - black stick figures if you are looking into the sun. NEVER shoot into the sun unless you are *trying* to get a silhouette.

3. **Rule of Thirds** – Most photographers use the "rule of thirds" which means you imaginarily divide your frame into three vertical and three horizontal panels – much like a Tic-Tac-Toe Board. Most people place their subject in the center square, but this often de-emphasizes the interesting backgrounds or foregrounds. If you place your subject slightly off-center, at the corners of the center square, you provide more foreground or background which often gives your photo some fluidity and provides some interesting effects.

4. **Clouds** – Very often a person takes a photo of an outstanding landscape but, at the moment the photo is taken, there are no clouds. Therefore, the picture has a large band of plain blue or gray (the sky). Try to take landscape photos with clouds – white, light or dark –as long as there is something in the photo to break up the monotony of a large band of blue or gray.

5. **Polarizing Filter** – if there is one thing you should spend a little money on, if you are a serious photographer, it's a circular polarizing filter. These should cost anywhere from $25 to $50 depending upon the size of the lens. If you're ever worn polarizing sunglasses, they give more contrast to the

scene, making your clouds stand out against a deeper blue sky, the trees greener then they really are, and they lessen the reflection off the water. A circular polarizing filter is essential for beautiful, rich photographs!

So remember, have a great summer, shoot lots of pictures, and since this is digital photography, you can always delete the bad ones!

Stuart Gershon is known as "The Digital Doctor". **If you ever have any questions, you can send them to stugershon@gmail.com and he will answer them. However, you can usually find an answer to ANY question by going to Google.com and typing in the question.**

iPad News and Tips

by Zane Clark

Is the iPad Right For You?
(This article first appeared in August, 2013)

This question was the basis for a recent column in Macworld Magazine by their senior editor, Chris Breen. He started with this question: should your Aunt Vilma buy an iPad? You could substitute any number of friends or relatives for Aunt Vilma, but it is still a good question. Breen notes that it is not an easy answer and people don't often find out how useful an iPad is until they have used one for a while. He listed some major talking points to help answer this question.

- Portability--An iPad, especially an iPad Mini, is made to be carried with you pretty much all the time. Portability means you are able to use the device more often than a laptop or desktop.

- Internet Access--By paying $130 more for your device, you can get access to the internet just about anywhere. This is great for traveling where free wi-fi Internet access may not be available.

- Ease of Use--Just about anyone can figure out an iPad in a few minutes. You can do amazing things with an iPad when you finally figure out that tapping an icon does something. It is also much easier to troubleshoot an iPad.

I will expand on this last point with a personal example. I first bought an iPad 1, and loved it immediately. Later when the iPad 3 was introduced, I opted to upgrade and gave my first one to my son. Later, the mini caught my eye, and so I made the plunge to this smaller, more portable device. When I started talking about giving the 3 to another son, my wife objected. By this time, she had started to play solitaire and a few other games on the 3. So now we had 2 iPads and I decided to see if I could get my very computer phobic wife to make a little more use of her device. I have had a computer for over 30 years and I have never been able to coax her into using it, but playing games on the iPad seemed to be a good start. So, I established an email account for her and hooked her up to FaceBook. With a little encouragement, she is now checking her email and FB regularly and just yesterday, she proudly announced that she had used Google to look up information on a new medication her doctor had prescribed! I will tell you that if my wife can do this, your Aunt Vilma can do it also.

As usual, if you have a question you can't answer, send me a note and I will try to help you.

Zclark@cox.net

Kretchmar's Korner

By David Kretchmar, Computer Hardware Technician

Printer Problems (part 2 of 2)

This is the second installment of a two part series addressing issues I've seen with printers, and how you can fix many of these problems yourself.

Sooner or later you will either run out of ink, or a cartridge will go bad before the ink is used up. Here in the desert I would be surprised if an installed cartridge lasted two years before drying out. Left sealed, most ink cartridges have a recommended shelf life of two years.

If you hear your printer going through the motions of printing, but the output is discolored or a blank page, it's a good bet that you have a bad or empty ink cartridge.

It is easy to isolate a printing problem to your printer. Try making a photocopy; if that fails, you know there is something wrong with your printer. If you are lucky the problem can be fixed by replacing a cartridge.

Should you buy OEM (original equipment manufacturer) ink cartridges or compatible (generic) ink?

If getting consistent and reliable results matter to you more than getting the cheapest price, you will want to stick with name brand OEM cartridges. Brands such as HP, Canon, etc. are responsible for the quality level of the product, often down to specifying what components and toner powder are used for their particular models. They do this, of course, because they are building and protecting a brand image.

Printers are sold with the razor and replacement blade economic model. Manufacturers make little or even lose money selling the printer, but the profit comes when consumers come back to buy ink cartridges. It irritates me that some manufacturers have started to beef up their revenue stream by including only "starter" cartridges with new printers, assuring that consumers will have to buy ink cartridges sooner.

Prices are high for genuine OEM cartridges compared to compatible or generic cartridges, so it is not surprising that many people want to save money buying the cheap clones. I have bought compatible ink cartridges on Amazon and eBay that cost less than 10% of the price of OEM cartridges. Before ordering ink online check the feedback and history of the seller – if they make a habit of selling bad products they will not be in business for long.

Will using non-OEM cartridges void your warranty or damage your printer? The short answer is no. The leading printer manufacturer, Hewlett Packard, has warned consumers of this possibility, but damage to printers by generic or compatible ink cartridges is very rare.

Will non-OEM cartridges produce the same number of prints as OEM? No they will not. You can count on having to replace non-OEM cartridges more often.

Will non-OEM cartridges produce prints as high quality as OEM cartridges. Again the answer is no, but the quality difference is barely noticeable with text. OEM cartridges will produce noticeably higher quality photographs, especially on photo quality paper.

Non-OEM cartridges are more likely to leak a drop or three of ink when unsealed, so always open non-OEM cartridges over a wastebasket. Non-OEM cartridges are also more likely to be duds, but this happens in only about 2% of cartridges, not nearly enough to negate the substantial cost savings.

What about ink refills?

Having cartridges refilled can save money compared to buying OEM cartridges, but usually this is not as economic as buying generic cartridges. HP cartridges can be refilled 2 or 3 times and still work well. After that, it can get dicey.   HP print heads are built into each cartridge so when you buy HP cartridges, you get a new print head with each installation. Canon and others have print heads built into the printer, and thus their cartridges can be refilled many more times.

Truly intrepid printer users can buy kits enabling them to refill their own cartridges, and this is often the best way to bring down printing costs if you are doing a lot of printing. This is not a good solution for most users. Refilling your own cartridges can be time consuming and, as you might imagine, messy.

Leave your printer on!

Consumer Reports Magazine and some printer manufacturers suggest you leave your printer on between jobs. The tiny amount of standby power used will cost much less than the ink used up when the printer turns on.

The dreaded "paper jam" error

 "Paper jam" is the error message you see when your printer senses there is something (obviously usually a piece of paper) potentially interfering with the paper's pathway through your printer. A printer sensing a paper jam will not print until this is corrected because your printer could be ruined by trying to force another piece of paper through an already clogged system.

To fix this, turn off your printer, remove the paper feeder tray, open the access to the printer cartridges and try to see or feel the offending paper. To avoid damaging the printer pull the jammed paper out very slowly with two hands if possible, doing your best not to tear the paper. You might have to carefully rotate the gears inside of the printer to free the paper. If that does not work most printers have access from the back of the unit. You might have to consult your printer manual (or Google) to see how to open the rear access to remove the jammed paper.

Don't be afraid the turn the printer upside down (and other orientations) and shake it vigorously. Sometime a small item such as a paper clip can fall into your printer causing the error message.

April Lab Monitor Schedule

Susie Scott **Vern Taylor**	**Wednesday** **April 2, 2014**
Marcy Ishum **Jeff Southwell**	**Saturday** **April 5, 2014**
Millie Taylor **Susie Scott**	**Monday** **April 7, 2014**
Tom Brennan **Jan Edwards**	**Wednesday** **April 9, 2014**
Fred Cohen **Jim Enlow**	**Saturday** **April 12, 2014**
Donna Bailey **Blanche York**	**Monday** **April 14, 2014**
John Pollet **Opal Smith**	**Wednesday** **April 16, 2014**
John Zuzich **Mary Hedin**	**Saturday** **April 19, 2014**
Marilyn Halvorson **Marti Hamilton**	**Monday** **April 21, 2014**
Joyce Davison **Tammy Collins**	**Wednesday** **April 23, 2014**
John Zuzich **Mary Hedin**	**Saturday** **April 26, 2014**
Lowana Mannlein **Sharon Cline**	**Monday** **April 28, 2014**
Carol Przybyclen	**Wednesday** **April 30, 2014**