Topics in IT:

1. **Internet regulation** - The Internet is a global network of computers that has been gaining in popularity since the 1980’s. The World Wide Web (WWW), a service offered because of this network of computers, allows users to view documents, images, video from all over the world. The Web has also grown in popularity over the years so much so that it is becoming an everyday tool for communication and commerce. This popularity and freedom of expression has led to concerns over whether or not the Internet should be regulated. Sexually explicit and violent content plague many web sites. Issues of loss of privacy and copyright protection are very common now. Laws such as the Communications Decency Act of 1996 have tried to regulate and protect individuals from dangerous Internet content.

   Describe the Communications Decency Act and what it is trying to accomplish. What are supporters of Internet regulation saying? What are opponents of Internet regulation saying? Based on your research, should more laws like the Communications Decency Act be passed? Why or why not? Will greater regulation help or hurt the success of the Internet? Why or why not?

2. **The digital divide** - In recent years, computers and the Internet have become important parts of daily life. Research, banking, shopping and communication are being done online. The ability to access the technology is seen as a valuable asset in the job market. However, the popularity of the Internet has been accompanied by awareness that a large number of people (mostly those who are poor, disabled, ethnic minorities, rural or inner-city residents) do not take advantage of the technology. Research has caused some observers to worry that rapidly changing technology might be increasing inequality, a situation they refer to as the digital divide. Others, however, feel that this problem has largely been remedied over the last few years, or feel that too much has been made of it in the first place.

   What is the digital divide? What has been done in recent years to address this issue? What are supporters of narrowing the digital divide saying? What are the opponents saying? Based on your research, should stricter measures be taken to narrow the digital divide? Why?
3. **Anti-spam regulation** - Everyone who regularly receives e-mail has likely received spam at some point. Spam is unsolicited e-mail, typically sent to millions of e-mail addresses at a time. Usually, spam contains advertisements for products or services that include, but are not limited to, dating services, prescription drugs, online casinos, discount watches and jewelry, diet pills or other weight-loss aids, automatic mortgage approvals, cheap loans, electronics, and jobs touted as allowing one to work at home and make thousands of dollars a week. For most Internet users, spam is simply an annoying presence in their e-mail inbox. But for some people, spamming is a way to make money, the 21st-century equivalent of sending out direct mail (more commonly known as "junk mail"). Small businesses pay spammers to send millions of e-mail advertisements a day; some of the most notorious spammers send millions of e-mails per hour.

What attempts has the federal government made to minimize spam in recent years? What are supporters of anti-spam regulation saying? What are the opponents saying? Based on your research, should the U.S. government enact even more restrictive anti-spam laws? Or should it recognize spam as an inevitable by-product of the Internet—even as a legitimate business in its own right?

4. **Copyright and the Internet** - In October 2007, Minnesota resident Jammie Thomas was found guilty of making 24 songs available on Kazaa, an Internet service used to exchange digital files, without the knowledge or permission of their copyright holders. As punishment, a federal jury ordered Thomas to pay $222,000 in damages to the Recording Industry Association of America (RIAA), a trade group that represents the major U.S. record labels. Thomas's case is just one of many recent controversies to involve copyright issues and the Internet. Copyright laws are designed to prevent creative works (such as songs, books and films) from being reproduced and distributed without their creators' permission. Under a strict interpretation of the law, Internet users can be punished for making any copyrighted materials available online without permission, regardless of whether they intend to profit from those materials.

Describe the evolution of US copyright law. How should copyright laws be applied to the Internet? Was the $220,000 judgment against alleged music pirate Jammie Thomas excessive or fair, in your view? What kinds of punishments do you think are appropriate for illegal file sharing?
5. **Citizen journalism** - In 1998, the number of Web logs, or "blogs," said to have existed on the Internet was approximately 50. As of January 2008, there were 112.8 million blogs, according to Technorati, a search engine that focuses exclusively on the so-called blogosphere, or the sum total of all the blogs on the Internet. In its most basic form, a blog is a journal, published on the Internet, in which entries, or posts, are presented in reverse chronological order, with the newest first. Most blogs are edited, maintained and written by a single person, who may choose to stay anonymous, but some blogs are edited by a group of people. There are even professional blogs, which employ writers, are usually updated many times a day, and earn revenue through advertising. Blogs can be about anything. There are blogs about sports, movies, poetry, fitness, parenting, science, language, fiction, comics, sexuality and gossip. Perhaps the most influential type of blog to emerge thus far is the political blog. Political blogs comment on current events and news stories, usually from a partisan perspective. Some of the most famous political blogs have gained an impressive amount of clout in both the political and journalistic realms: Many reporters and politicians say they regularly read blogs; some reporters even acknowledge that they pick up story ideas from reading blogs.

Should Web logs, or "blogs," be recognized as a valid form of journalism? Or do blogs actually coarsen the national political conversation? Go on the Internet and look up a political blog or a citizen-journalism Web site, and read through a sampling of its content. Does the Web site provide valuable and reliable information? Why or why not? Would you describe the Web site as "journalism"? Why or why not? Write a brief overview of the content of the Web site, and present your findings.

6. **Laptops in schools** - Computers and the Internet are often hailed for making the sharing and gathering of information easier. Those same qualities would seem to make them extremely useful educational tools. In recent years, school and government officials at various levels have introduced laptop computers into classrooms throughout the U.S. However, laptop programs have recently been criticized by some observers, who charge that the computers are misused by students, cost too much and offer little educational benefit. Some schools have discontinued their laptop programs just a few years after starting them. There is, therefore, much debate over what role, if any, laptops should play in educating students. School laptop programs vary throughout the country. Some programs receive funding from the state or federal government, while others are covered by the school district. In some cases, students' families are expected to pay laptop rental fees. Access to laptops can vary too, from programs in which each student receives a laptop and takes it home at night, to programs where students have access to a group of laptops but do not have individual computers.

What are the critics saying about children having laptops in school? What are the supporters saying? Do you think that giving students laptop computers can improve their education? If so, in what ways?
7. **Cellular Telephones** - In 2006, nearly four out of five Americans (77%) were cellular telephone users. Indeed, cellular telephones—more commonly referred to as cell phones, or mobile phones—have assumed an increasingly prominent place in American life since their introduction in the early 1980s. Today, many Americans use their cell phones as their primary method of communication. Nearly 12% of all Americans, in fact, live in houses that do not even have a dedicated land line for phone service. They simply rely on their cell phones for all telephonic communication. Cell phones today are vastly more powerful than they were just four or five years ago. Modern cell phones—such as the iPhone, made by Apple Inc., and the BlackBerry, made by Research in Motion Ltd.—can play music, show movies and even be used to browse the Internet. They can store thousands of phone numbers in an electronic "address book," thus eliminating the need to memorize phone numbers. They can be used to send electronic mail, text messages and even pictures; many cell phones come outfitted with built-in cameras. Teenagers and senior citizens alike are dependent on their cell phones in ways that seemed unimaginable just a decade ago. But is this reliance on cell phones a good thing? Critics have argued that cell phones play far too large a role in our lives. Cell phones can interfere with our ability to drive cars, enjoy nature, and even interact with one another in a civilized way.

Discuss the major cell phone issues such as driving safety, etiquette, socialization, and cancer. What are the supporters of cell phone use saying? What are the critics saying? What effects—both negative and positive—do cell phones have on your life?

8. **Electronic Privacy** - The Constitution's Fourth Amendment guarantees "the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures." Supreme Court Justice Louis Brande helped define privacy as "the right to be left alone--the most comprehensive of rights, and the right most valued by civilized men." In the 1990s, personal data has become a valuable commodity that is sought by businesses and advertisers. The number of data collection companies in the U.S. has increased ten-fold over the past five years. Data companies offer information to many different customers, including financial institutions, collection agencies and direct marketers. Consumer buying habits or pharmacy records can be easily matched with income and address information. In addition, the rapid development of the Internet has added another dimension to data collection and dissemination. Some data companies make their services available over the Internet, or "online." The Internet has combined the availability of rich stores of data with powerful search engines that make it easy to retrieve specific pieces of information. Not only has the Internet's free form made it much easier for the average person to access information, but online businesses can now track their customers' activities in ways they had previously only dreamed of.

Describe the existing privacy protection regulations or federal laws meant to protect the privacy of citizens. Are these laws adequate for protecting privacy? Why or why not? What are defenders of electronic privacy saying? What is the opposition to electronic privacy saying? What more do you believe could be done to protect individual electronic privacy?
9. **Tomorrow’s workforce** - Many labor market analysts are concerned that tomorrow’s workers will not possess the skills they need to qualify for the kinds of jobs being created in the changing economy. Concern has arisen because business leaders contend that there is a large gap between the skills of U.S. workers and those that are needed in the workplace. The debate centers on the labor needs of the information technology sector--computer software and hardware firms, manufacturers of advanced communications products and developers of Internet technologies. Industry leaders say that they need skilled foreigners for high-tech jobs because not enough U.S. workers are qualified to fill them. High-tech industry leaders want Congress to raise the cap on the number of temporary visas granted to skilled foreigners. They contend that their inability to hire the talent they need has hurt their competitiveness, holding up the delivery of new products and killing sales and profits. In 1990, Congress amended the country’s immigration law to admit more workers who have high skills. The legislation created the H-1B category to allow U.S. companies to hire foreign workers on an emergency basis. Under the program, firms may hire foreigners with special job skills, and those foreigners may work in the country for up to six years. Immigration law strictly limits the number of skilled foreigners U.S. companies may hire to no more than 65,000 per year.

What are the advocates of raising the cap on foreign workers saying? What is the opposition to raising the cap on foreign workers saying? What roles should each of the following play in enabling U.S. job seekers to acquire essential computer skills to compete in tomorrow’s workforce: government, the public education system, colleges and business?

10. **Biometric Identification** - Until recently, the only form of personal identification available was a card with the bearer's name, picture and, perhaps, signature. As a means of proving identity, the standard cards are severely lacking, experts say, because they are easily altered or forged. New technology called biometrics, however, is making it possible to positively establish the identity of a person. Biometrics is the science of measuring and analyzing biological data in order to confirm the identity of an individual. The biological data that biometrics measure and analyze range from facial structure to fingerprints to retinal size to vocal pattern. Although the use of biometrics has been common in spy movies for years, very few companies actually use biometrics at the present time. Those that do use it tend to be in the technology sector and, therefore, have both the access to and the need for biometric technology, because they rely on computers for storage of sensitive data. However, biometrics, as an industry, is growing rapidly, according to the International Biometric Industry Association. The first highly publicized use of biometrics occurred in January 2001, at Super Bowl XXXV in Tampa, Fla. Tampa police announced that they would be using face-scanning technology to look for felons and those with outstanding warrants as the crowd entered the stadium for the game.

Describe how biometric identification works. Explain where biometric identification systems are used today. Is biometrics the security wave of the future? Why or why not? Or will it destroy privacy? Why or why not?
Bibliography


Visit the IT web site at: [www.mccc.edu/info_tech](http://www.mccc.edu/info_tech) to learn about our academic programs

IST101 is taught at [Mercer County Community College](http://www.mccc.edu), Trenton, NJ