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# Importance of the Internet in University Curriculums: A Case Study at Sam Houston State University

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## Abstract

The advances in technology today have made the use of the Internet important in almost every discipline. Educators, business people, scientists and those in the criminal justice field all rely on the Internet to help them perform their jobs to the fullest. The Internet is immense and has many uses that can assist student in each discipline. Knowledge of the Internet and the full extent of its capabilities are important to anyone entering the workforce in today's technologically advanced environment. In order to keep their graduates competitive in this environment, it is important that universities offer courses which not only cover the basics of Internet use but also show how the Internet can help them advance and excel no matter which field they enter. The current lack of a course for all students which covers in-depth internet use opposed to the number of fields that utilize the Internet, and the extent to which they use it, exposes the need for a course to better prepare students for the changing environment they will enter after graduation.

## 1. Introduction

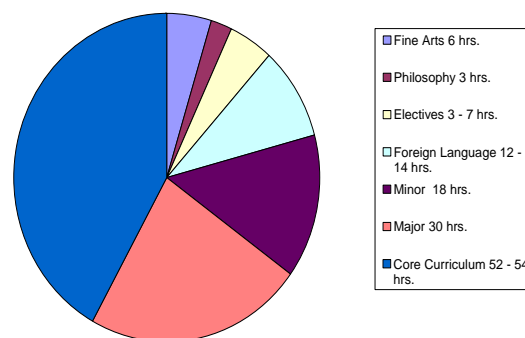
The Internet is "a network of computers interconnected throughout the world operating on a standard protocol that allows data to be transmitted" (Kotabe and Helsen, 2001, 604). The Internet is widely regarded as the greatest invention of the 20<sup>th</sup> century. Since its introduction to the general public in 1990, the Internet has become one of the most widely used tools in many disciplines. The ease of access and amount of information coupled with reduction in prices for both hardware and software has made the Internet invaluable to many professions. Regardless of ones field of study or discipline, the Internet is likely to be used on a regular basis in today's dynamic environment. The Internet is "altering the way companies reach their customers, affecting advertising, shopping, distribution and the way companies communicate with one another and with their staffs" (Cairncross, 1997, 119). Marketing over the Internet is expected to continue to grow, and it is "estimated that even taking into consideration the slowdown of the Internet economy, global business-to-business transactions in 2003 could reach about 6 trillion dollars" (Castells, 2001, 65).

The complexities of this new medium and its growing significance and importance make it especially important

that all university graduates have a full understanding of (which should include not only the opportunities available, but also the limitations and dangers posed by) the Internet. Currently, most US Universities require that all students (irrespective of their major) take a basic computer literacy course (e.g., Introduction to Information Systems, Introduction to Computer Science, Introduction to Library Science, etc.). Most of these courses teach freshman students application software (e.g., Word and Excel), how to send and receive e-mail, and how to use a browser and access the World Wide Web. While a computer literacy course is needed and necessary, such a course only skims the surface of the important and vast uses of the Internet. It is in our opinion that a second mandatory course titled "Introduction to the Internet", which focuses solely on the Internet and related applications (e.g., Intranets and Extranets) would be invaluable to university students pursuing a Bachelor's degree.

The following pie charts show the current breakdown of classes at a state supported institution of higher education (i.e., Sam Houston State University, Huntsville, Texas). The example uses the Bachelor's of Arts degree plan to express the division of hours. While each college may have a slightly different plan of hours, most require the fulfillment of a core, mandatory curriculum, major and minor degree hours and a varying set of electives. This pie chart shows the 128 hours required to graduate as they currently stand (i.e., without an Introduction to the Internet class). The largest section of hours a student takes is clearly the core curriculum, which is intended to give every student, regardless of major, an understanding of each field of study and ability to function in a complete manner in the professional world.

Current Bachelor's of Arts Degree Requirements



Students currently graduating with undergraduate degrees may not have all the skills necessary to be successful in today's competitive environment. Although they have taken the classes designed to make every student competent in a variety of areas, they can be lacking in a field that is quickly growing. Students graduating today must be prepared to utilize the Internet to its full potential. The widespread use of the Internet is quickly placing anyone with only marginal knowledge of its uses at a competitive disadvantage. The creation and utilization of a cross-disciplinary "Introduction to the Internet" class, that every student takes as part of their core curriculum, may help to prepare students better, regardless of their major field of study. The primary purpose of this class would be to introduce all students to the basic principles of the Internet (i.e., posting web pages, validating information downloaded, privacy and security issues, E-commerce transactions, etc.).

In an effort to express the penetration of the Internet into a wide variety of disciplines, the following sections review a few of the uses of the Internet in a selected number of disciplines (i.e., majors) taught at Sam Houston State University. The self-selection of the disciplines was done to provide a representative sample of the types of degrees offered at typical four-year academic institutions in the US. It can be argued that illustrating the importance and uses of the Internet in a selected few disciplines makes it equally important for any student pursuing a degree at a university to be competent in the new technology. The various uses of the Internet by businesses today reflect the need for a required comprehensive course at the university level to prepare students for successful careers. Understanding the various uses of the Internet is also critical from a consumer's perspective so as to make better (more informed) decisions. Next, we will highlight the various applications of the Internet to the following disciplines: Education, Literature, History, Sciences, Criminal Justice, and Business.

## **2. Education and the Internet**

The Internet has become a tool used by many educators in classrooms at every level of education (from freshman to post-graduate). College Professors assign online exercises and post their syllabi and course material on their websites. Distance learning courses are offered at most large universities, and some college degrees can now be obtained online with no actual class time required (e.g., University of Phoenix). Educators in grades K-12 are also finding uses for the Internet in their classrooms. Children can communicate with experts and with students in other classes via computers (e.g., <http://www.OnlineClassroom.com>). Even disabled children are able to experience the benefits of the Internet with new advances in software. The Internet is opening up new ways to educate and explore material in and out of classrooms.

All schools, colleges, and Universities have embraced the Internet and use it extensively to maintain a

differential advantage. Almost every University has a web page ([www.shsu.edu](http://www.shsu.edu)), and many offer online classes. Students who work full-time can finish their degrees without having to attend physical classes. University students can also interact with professors through e-mail, virtual chat room, and posting of FAQ on websites. In the 1997-98 school year alone "more than 27,000 college-level courses were delivered over the Internet" (Woolf and Lesser, 2002, 2). Universities that do have actual classes, which meet often, assign research that requires the use of the Internet. Many professors post their class assignments on their personal web pages.

Educators in grades K-12 often use the Internet as more of a teaching tool. Recently a "study by Interactive Education Systems Design found that over 40 percent of high schools already offer online courses or plan to during this year" (CyberAtlas, 2002). Web sites offer lesson plans and online activities in collaboration with cities ([www.thirteen.org/wnetschool](http://www.thirteen.org/wnetschool)). Internet teaching companies like OnlineClassroom offer interactive guides for students and teachers in K-12. Students can interact with other classrooms or ask question of experts in certain areas if they sign on during a demonstration. Students can be exposed to different cultures and fields of study as they gain computer literacy skills.

Teachers in K-12 can teach their students how to use the Internet to their advantage. Students can learn how to quickly obtain quality material as well as how to judge the reliability of the information they discover. Some Universities (e.g., Purdue University) offer online guides and tutorials that teach students how to judge Internet material based on a "basic model emphasizing and integrating topic definition, information seeking, and evaluation" (Brandt, 2002). Teachers can give their students the safety guidelines, utilized by Purdue University and others, which they will need to navigate the Internet on their own through guided in-class instruction. The Internet has a wealth of information, but not all of it is legitimate or appropriate/suitable for everyone (e.g., children).

Teachers may also find that their ability to assist students with disabilities improves with the use of the Internet. Many educational Internet sites are geared toward students who have learning disabilities. The Parent Education Network (PEN) has compiled a database that directs those with disabilities to helpful websites, like *The Boulevard* geared toward those in wheelchairs (PEN, 2001). Software to assist the blind in navigating the Internet is available as well as headphones and captions that assist the deaf. For a student who is physically challenged, the Internet may present an opportunity to interact with others and "see things", which they otherwise would be incapable of experiencing.

The Internet also opens up many possibilities to educators. Distance learning and online classrooms offer new and interesting ways to present material to students. Teachers can now attend online classes, which present them with ways to enhance their students' learning experience through the Internet. It is important that teachers have a comprehensive understanding of the

Internet in order to communicate sound advice to their pupils. Universities now expect their students to be knowledgeable in online research, and many Universities offer classes that take place completely over the Internet. The Internet is quickly becoming a necessary tool in the education system, and soon no child's education will be complete without knowledge of the uses and pitfalls of the Internet.

The importance of the Internet in education is continued in the realm of literature. Literature and education are closely related for all those teaching or interested in teaching. The Internet is a tool that those concerned with or attempting to study literature can use to advance their knowledge. The next section outlines the uses of the Internet in relation to the literary field.

### 3. Literature and the Internet

The use of the Internet has greatly affected the literary field. The speed and ability to reach new customers that the Internet offers makes it an ideal new market for writers and publishers. Research, which traditionally had to be done in a library, can now be achieved online as articles and journals become available electronically. Teaching literature and encouraging children to read using the Internet has also had an impact on the literary field. The use of the Internet is rapidly transforming the literary world and allowing literature to remain current in a quickly changing world.

Both writers and publishers have realized the importance of the Internet as a tool to expose their work to wider audiences and as a new way to market their product. Writers are also taking advantage of the Internet by pursuing a multiple distribution strategy, by giving special offers at online bookstores and publishing seek-peek chapters of their novels to entice readers into purchasing. Novices are grabbing attention by displaying their work online in the hopes that readers will purchase their next work or that publishers will stumble across them and offer them contracts. The *Internet Public Library* and *Bookwire* both offer Reading Rooms in which thousands of complete online texts are available (Flack, 2002). Large publishing houses like Penguin Putnam Inc. are using their home pages as a channel of distribution to display the work of their new writers, offer background information and to sell directly to their readers (PenguinPutnum, 2002).

Other online retailers have realized the benefits of selling directly to their customers as well. While bookstores and libraries were once the only ways to obtain literature, the Internet has opened up an entirely new showcase. Readers can use search engines to find novels or go to any major online bookstore (e.g., Amazon.com or Barnesandnoble.com) to find the book they are looking for and have it delivered. Most online bookstores also sell student textbooks, making it easy for college students to purchase their textbooks online and avoid monopolistic campus bookstores.

Library research has also been greatly affected by the Internet. While research once required a trip to the local

library and hours at the card catalogue, it is now possible to do most research from the convenience of your home or office. Internet websites like the Librarians' Index to the Internet, which offers "more than 10,000 Internet resources selected and evaluated by librarians for their usefulness to users of public libraries," can help researchers evaluate their research material (Schneider, 2002). Professional Literary Journals and many novels are available in full-text on the Internet. Large libraries offer online tours and give readers the option of checking out their books through inter-library loan programs. A reader in a remote region can checkout a book from a major library with the help of the Internet. Most magazines and newspapers also make their material, as well as archives of their past articles, available online. With the use of the Internet, the time necessary to research has decreased as the amount of information available has increased.

As the Internet continues to change the availability of literature and decrease the difficulty of attaining quality work quickly, its use as an educational tool concerning literacy has increased. It has become easier to obtain literature and expose students of all ages to great works for a fraction of the cost of obtaining hard copies of the original literary works. Student Internet literacy programs have increased as schools make Internet access a regular part of their curriculum. Students are now taught Internet researching skills and are exposed to a wider range of material at an early age. The Internet has the ability to make literacy in schools easier to achieve through online programs as well as provide students with a greater range of interesting materials.

In summary, the Internet is having a great impact on the world of literature. Through use of the Internet, literature has become easier to obtain from online bookstores and libraries. Research in the literary field has been made easier by online literary journals and magazines, which offer full-text articles. Even teaching literature in schools and Universities has been affected by the availability of literature and research materials. The literary work has become more easily accessible through the Internet, and anyone training to enter the literary field must be competent in the uses of the Internet.

#### 3.1 Historians and the Internet

The discipline of studying and recording historical events has changed quickly in the last few decades. A major source of this change has been the invention and the increased use of the Internet by historians. Educating students, as well as sharing information between colleges, has been made simpler and faster, thanks to the Internet. There are pieces of visual history that could be viewed by only a few, but can now be downloaded by anyone who has access to the Internet. Children can tour the Louvre "through sixty panoramic views of the museum provided by QuickTime technology" without leaving their school (Louvre, 2001). Architects can also use the Internet to send digital pictures of excavation finds to labs hundreds of miles away within minutes of discovery and obscure

knowledge of historical acts can be found on the web. The ability to record and share historical information has become easier and more readily accessible to the masses thanks to the Internet.

For generation, the only way to learn about historical acts was to research them in books. Professional historians often had to travel miles to gain access to rare books in libraries. Students also had to rely on slow research through books in an effort to learn about acts of historical significance. The Internet changed all this by making large amounts of information available to anyone with Internet access. Large search engines like [www.dogpile.com](http://www.dogpile.com), which uses Altavista, Ask Jeeves, etc. can help students find the information they need quickly (Dogpile, 2002).

Access to visual historical objects has also increased due to Internet technology. Major museums can place all of their paintings, sculptures and other objects on a virtual tour that allows Internet users to view the object from more than just one angle. Many museums now offer similar virtual tours which allow visitors to “visit a virtual museum anytime and from anywhere and see their favorite things long enough without being anxious about other visitors crowding around them” (Kadobayashi, 2002, 212). Students who have never been out of urban neighborhoods in America can be exposed to Greek statues and Roman mosaics. Art and historically significant objects that were once difficult to access can now be viewed by those who might otherwise have never had the opportunity. Digital pictures of discovered artifacts can also be sent across the Internet to be analyzed. Delicate artifacts need not be shipped for other experts to analyze them when detailed digital pictures can be sent in minutes.

Government documents are also more easily available to the masses, thanks to the Internet. Historians can access documents without the hassle of waiting for copies of documents in the mail. Important speeches and legal documents with historical significance are all available through the Internet as are “federal public documents (including slide presentations made by officials)” (Cairncross, 1997, 260). The accessibility of official documents through the Internet and the ease and convenience it offers also increases the ability of those with an interest in genealogy to research their background. Historical documents and artifacts are becoming easily accessible to those who have an understanding of the Internet. Art Historians can find resources at numerous websites (e.g., [www.wisc.edu/](http://www.wisc.edu/)), which has compiled a database of art images and publications ranging from photographs to local artifacts in third world countries (Internet Resources for Art Historians, 2002).

The use of the Internet has changed the accessibility of historical knowledge as well as made it easier to teach history and to more efficiently store historical information. Information, which was once difficult to find, is now available at one’s fingertips. Teaching history in an interesting way with the use of the Internet is now possible as teachers take their students on virtual tours of museums. The use of the Internet has changed

the way we gather and share information, and in so doing has changed the way we view and record our history.

### 3.2 Science and the Internet

The Internet has given the field of science the opportunity to market itself in new ways. A broad range of science-based information is available on the Internet. Many tutorials are available for children who have difficulty with chemistry or physics while interesting sites also display fun scientific discoveries. Pictures from the Hubble satellite can be viewed online, as well as geological information about the earth’s atmosphere. Studies in environmental science are often posted online as many environmental activists have informative websites. The information is more easily available, and the ability to market this industry grows with the expansion of the Internet.

Professionals in the field of science can access the web to hunt for jobs and display their own research with ease. Many websites are focused on finding opportunities for those exclusively in the science field. Students can also access science information and use Internet tutor programs to help them advance in the field of science. There are numerous websites dedicated to assisting students like *Chemistryweb*, which is an “annotated directory of Internet resources for students, educators and researchers” (Lawal, 2000). Students from primary school to post-graduate college can utilize tutor programs provided by chemistry organizations online.

Major chemical businesses also utilize the Internet to market their products. Large oil companies, like Shell, show off their products online and encourage investors as they exhibit new uses for their products. Other major science based companies have interactive websites, which increase interest in their product while improving their image. Government based science programs also display Internet information as well as accept applications online. NASA’s website gives information about their location, launch dates, and offers information about applying for positions online (NASA, 2002, website).

The realm of environmental science on the Internet has also increased in the past few years. Interest in endangered species and the effects of pollution on the environment are just two reasons why the Internet has been used to display information concerning environmental science. Databases, which can be easily accessed and searched, hold large amounts of information concerning all aspects of the environment. Scientists interested in this field can find information quickly, and those interested in conservation of natural resources can also use these databases.

The Internet has made it easier for those in the field of science to share and gather information concerning many different areas of the Internet. This quick exchange of information and expanded resources make it important to be prepared for the high-tech environment. An understanding, coupled with an ability to fully utilize, the Internet will be a necessary task in the future for anyone planning to enter the field of science.

### 3.3 Criminal Justice and the Internet

In the field of criminal justice, the Internet represents an enormous challenge as well as a tool that can be utilized to educate and assist in crime prevention and solution. The use of the Internet has opened up entirely new avenues for criminals while providing them with anonymity. The challenge of tracking down criminals and prosecuting them on existing laws has become increasingly difficult for those in the criminal justice field. In order to prevent crime and prosecute criminals, knowledge of the Internet has become necessary for those entering the criminal justice field.

The Internet has allowed the criminal justice field to expand and become more easily accessible than ever before. Government websites provide full text documents that include previously difficult to obtain case transcripts. Lawyers are finding it easier to research for court cases due to the amount of information on the web that they can utilize.

Another aspect of the changes that the Internet has brought about in the criminal justice field is the entirely new avenue it has created for criminals to commit crimes. Criminals can invade the privacy of those who use the Internet and commit fraud that is difficult to trace in the physical world. Anyone with a computer can attempt to access the personal information that is stored in large databases on the Internet. Hackers can destroy large amounts of information online and are hard to detect. A Pentagon report stated, "a staggering 96 per cent of security breaches were found to have been detected" (Barrett, 1998, 40). Although they are protected by firewalls, credit card numbers from online purchases, banking information, and social security numbers are also accessible to hackers through the Internet. Child pornography rings have also become a crime perpetrated on the Internet. Criminals find the secrecy of the Internet the perfect medium to exploit children without exposing themselves unduly. These crimes are becoming more prevalent as the Internet grows, and those entering the criminal justice field will have to determine actions to control this behavior.

The new and faceless crimes on the Internet can be difficult to prosecute for several reasons. Existing laws often do not cover this relatively new medium, and the slow pace of passing legislation does not keep up with the lightning pace of the Internet. The international aspect of the crimes committed often-complicate matters considerably. For example, if a criminal in England steals American credit card numbers off of the Internet and uses them to make purchases in Japan, the issue of who has the right to punish the criminal comes into question. Fear of greater Internet crimes, like terrorism, is forcing those in the criminal justice to overview our current laws and pass new ones. The Patriot Act is an act that "permits federal investigators to use more-powerful tools to monitor phone calls, e-mail messages, and even Web surfing" (Kandra, 2002, 38). The changes in local laws may mean less privacy in order to achieve safety. Internet legislation varies widely from country to country

and those in the Criminal Justice field will be forced to deal with international issues when encountering the Internet due to its very nature of having no tangible geographic boundaries.

Those who plan to enter the Criminal Justice field will obviously be forced into dealing with the Internet. Those who neglect its research abilities will fall behind as more and more information concerning the Criminal Justice field becomes available online. The new opportunities available to criminals also make it imperative that those in this field have adequate knowledge of the Internet in order to discover and fight the crimes being committed on the Internet. The need for legislation that covers the criminal actions on the Internet and the international aspects on the Internet is also obvious. Anyone planning to enter the Criminal Justice field will obviously be left at a disadvantage without adequate knowledge of the Internet.

### 3.4 Business and the Internet

The Internet has also affected the diverse field of business tremendously. The Internet has opened up an entirely new way to run a business and market goods to the public. Obtaining consumer information is easier than ever thanks to the Internet. One-to-one marketing is feasible even for small and medium size businesses. Consumer convenience has increased due to this new medium as has acceptable product standards. Small and medium size businesses are able to compete with large multinational corporations. International trade and sales are increasing due to the ease, accessibility, and cost transparency created by the Internet. Studies show that "Large companies implementing Internet technologies already are realizing improvements of 13% to 21% in financial performance measures" and "small companies...can achieve even greater benefits" (Anderberg, 2001, 4). Anyone entering the business world in the future will surely encounter the Internet and experience the changes the Internet has brought about in the marketplace. The importance of a full comprehension of the power and effects of the Internet, as well as ability to use it to ones advantage, is necessary in today's market.

The Internet has allowed a new way of marketing products. Retailers can be removed in many instances as wholesalers and manufactures use websites to sell directly to their customers for minimum cost to the company (commonly referred to as dis-intermediation). Even small businesses can compete on an international level using the Internet if they have set up an appropriate infrastructure to handle their orders. The playing field has been leveled to a certain extent as small companies enter the market alongside business giants.

The importance of the Internet as an emerging and growing market cannot be ignored by business people. The Internet is a desirable marketplace since it is both measurable and sizeable. The Internet is certainly a growing market as "the rate of growth of Internet use in the United States is currently two million new internet users per month" (Anonymous, 2002, 4). Government

studies also show that “in September 2001, 143 million Americans were using the Internet – an increase of 26 million in 13 months”(Anonymous, 2002, 4). The number of global users is expected to almost double in the next two years, making the Internet market an increasingly desirable place to conduct business. An understanding of this growing market and the ability to compete in this new and expanding market will be a requirement for all who are entering business fields in the future.

Marketers can also gather information from this growing market with greater ease than ever before. Every click of the mouse that an Internet surfer makes can be monitored to discover their habits and preferences. Cookies, which are “digital markers automatically placed by websites in the hard disk of the computers that connect to them, so that internet sites like Amazon.com can keep track of their customer preferences and can design personalized sales techniques for each customer and market to them more efficiently” (Castelles, 2001, 171). Internet based marketing research is also popular and relatively inexpensive, thereby making it easy to obtain information from the consumer. The wealth of information makes it easier to market to each customer more efficiently.

The Internet does present several difficult issues that those in the business field must be aware of and be prepared to face. The global aspect of the Internet means that language and cultural barriers will almost certainly be encountered by anyone using this medium. The language of a website can effect its ability to be effective in an international market. Customers are three times more likely to buy a product off a site if the site is in their native tongue. If Internet entrepreneurs plan to be successful internationally, they must provide their site in multiple languages to appeal to all customers. The use of the Internet may vary from culture to culture as well. Some cultures prefer to interact in person and do not like to give out their credit card information, which makes it difficult to perform online transactions.

Business people must realize the difficulties presented when selling over the Internet, but even those who do not must confront the changes the Internet is making in the global society. Price transparency is becoming more prevalent all over the world as people in every country become aware of the prices that are being paid in other countries due to the Internet. Consumers in England are not willing to pay double the price of Americans when they can see the price difference on a website. International trade is changing due to the Internet, and those who neglect becoming involved may be left behind. Customers can find convenience and speed on the Internet through quick delivery. Even local retailers must compete with the Internet as any customer with a computer and Internet access can be lured away from the local market into the Internet market.

In the future business people may find it impossible to succeed without a full understanding and use of the Internet. Online banking and shopping are creating new ways to do business in the marketplace. The ease of

collecting consumer data is changing the way customers can be marketed to on the net and the ability to establish more one-to-one marketing situations. The very way that businesses interact internationally is changing as the Internet makes it easier and more productive to sell internationally than ever before. The incentive to fully understand the Internet and be prepared to tackle the barriers encountered in the Internet is great for anyone entering the business field. The Internet is quickly changing the way the world does business, and in order to keep up, an understanding of the Internet is required.

## 4. Conclusion

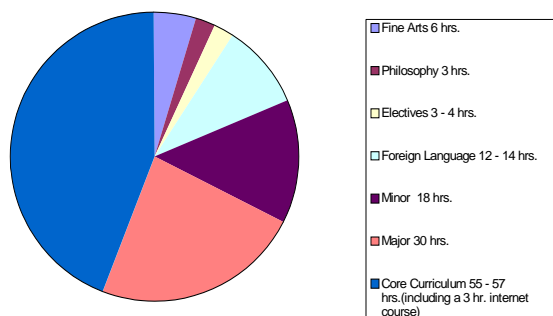
In conclusion, the Internet has become a necessary tool for all disciplines today. The Internet is used by educators, business people, scientists, and historians alike. The Internet has changed the global market as well as the way we share information, communicate, and educate. The information available on the Internet is immense and it is important to be able to decipher the reliability and accuracy of all information collected.

It is therefore important that all students with hopes of entering professional fields have a complete understanding of the Internet and its uses. Currently there is not a comprehensive Internet course offered as a part of the core curriculum at Sam Houston State University, but the need for such a course is obvious. The use of the Internet continues to expand, and the opportunities that the Internet provides are vast. Every professional in the future will likely encounter the Internet and be able to enrich their professional experience through intelligent use of the Internet. The role of the Internet in society is only likely to increase, and anyone entering the workforce without a complete understanding of the Internet is entering with a disadvantage. Universities have a responsibility to prepare their students for the field that they choose to enter, and without providing courses that adequately cover the use of the Internet, universities are falling short in their responsibilities.

It will only benefit students to require a mandatory class, which will teach the basics of Internet practices. As the pie chart below illustrates, the addition of an “Introduction to the Internet” course in the core curriculum section of the degree plan will have little effect on the overall dispersal of hours. However, this class will provide students of every major the knowledge of current technology that is now necessary in order to succeed as a student and advance as a professional. By removing 3 hours from the electives category and adding them to the core curriculum minimal hour shifting is needed to achieve the hours required for an Internet course. Electives hours change from college to college while the core curriculum stays basically the same across the board. With these minor changes to the existing core curriculum, an important addition to the University learning process can be achieved.



#### Bachelor's of Arts Degree with the Addition of Required Internet Course



The information disseminated through an "Introduction to the Internet" course will benefit students immensely as they learn to research, create web sites, and decipher the reliability of information available to them over the Internet. Every student regardless of their discipline of study could benefit from such a class. The class would be taught in such a way as to provide the basics of Internet use without becoming too specific in any field of study.

The following syllabus is an example of one that may be used in an Introduction to the Internet course (see Appendix). The syllabus avoids being too "major" specific while being sure to cover the most important aspects of the Internet that effect students and professionals today. A short course schedule is included at the end of the syllabus and direction for the syllabus was taken from lesson plans on OnlineClassroom.com.

## 5. Research Limitations

Any research into a topic has limitations and the very nature of the Internet increases the likelihood of limitations. The Internet is constantly changing and expanding. The number of people using the Internet and the things that they use the Internet for are also constantly changing. This constant change makes all material gathered reliable for only a short period of time. When this paper is finished it will already be behind in its ability to relate the current status of the Internet.

It is extremely difficult to find up-to-date information about the Internet as a classroom focus. Since many resources on the use of the Internet are also found on the Internet, there is the issue of quality control. It can be difficult to choose material that is valid in the vast amount that is available on the Internet. Relying on print sources where the publisher has hopefully analyzed the material for quality control is tempting, but print materials quickly become outdated due to the time it takes to print them. Finding current materials that are of high quality can be complicated, and even the best research will quickly be outdated.

## 6. Future Research

Future research of this topic will be a requirement for anyone interested in the importance of educating college students in the use of the Internet. The quickly changing world of the Internet will make it important to have current material. A study of the newest resources and journals on the topic available on the Internet as well as the latest publications on the uses of the Internet will be helpful. Hundreds of new journals and books are published each year on the Internet and most are out of date within a year or two of their publication. Future research could also include field studies that were unable to be completed here due to time and resource constraints.

Research that reveals the number of Universities that offer a course that covers only the uses of the Internet, and how many of these courses are mandatory would be of use in determining the standards of other Universities concerning the Internet. Surveying students at Sam Houston could also be conducted at a future date and may prove very useful in establishing students' willingness to take such a course. Surveying students to discover how often they use the Internet and how comfortable they feel using it may help to establish a need for the class. Another survey of University professors may be of use in determining the need for such a class. Professors could be asked questions that determine how often they assign work that requires their students to use the Internet and how well they feel their students utilize the Internet.

A pilot study could even be conducted in which a sample of students would actually take the course in place of the current required computer course if they already feel skilled at basic computer knowledge. This group of students would be surveyed at the end of the course to determine if they found the course useful and if they felt that their Internet skills had improved their studies. At the same time, the group of students who completed only the computer class could complete a questionnaire to relate their feeling of competence on the Internet and ability to complete basic Internet functions, creating web pages and searching for quality information. After both groups are evaluated, their answers could be compared to determine if the current class adequately prepares students for Internet use or if an Introduction to the Internet class is needed.

Other research could also be based on the importance of Internet experience to agencies and corporations, which may hire from the Sam Houston State University pool. Is it important to these businesses that students be able to use the Internet with ease. Also, how many of these corporations allow or encourage telecommunication and what percentage of their employees telecommunicate? How many of these businesses hire employees from online applications and what percentage of their applications are online? These questions will help to reveal the importance of the Internet in the businesses that come into direct contact with Sam Houston State University students and regularly hire from the Institution.

Future research may also include creating a budget for such a class. Projecting a budget cost for starting an "Introduction to the Internet" class at Sam Houston State University and maintaining it. Will the computers and



Internet connections at the University be adequate to support a mandatory Internet class or will it be necessary to expand the computer materials now on campus? Will current computer fees from students cover this cost or will it be necessary to raise the cost of attending the University through increased Internet fees?

All future study into the uses of the Internet and the importance of the Internet to University students should be made as close to the date that the information is needed in order to ensure that the information is current. The ever-changing world of the Internet makes it important that future research is done when evaluating the subject. The importance of surveying students, professors, and businesses to determine the desire and need for an Internet class will be invaluable to those trying to reveal a need for such a course. Creating a projected budget is also invaluable in revealing whether such a class is possible at this time. The cost of such a class may outweigh the benefits of making it mandatory, and creating a budget for the course will reveal this. Regardless of the cost though, an Introduction to the Internet course is needed as the world changes and Internet skills become requirements in every profession.

## 7. Appendix

*Sam Houston State University  
Introduction to the Internet - Course Syllabus*

*Course Description:* This class will focus on the uses of the Internet and on gathering information on the Internet. Students will have hands-on experience in gathering information that is reliable and utilizing it to complete class projects. Every student will be responsible for creating their own website, creating links to other sites, using electronic mail and researching their subject online.

*Course Objectives:* To familiarize every student with the uses of the Internet. Make students comfortable with the research and quality control aspects of the Internet. Teach each student to create their own website and how to best utilize the Internet regardless of the field of study they plan to enter.

*Contents of Class:*

1. Surfing the Internet
2. Compare/contrast commercial and educational homepages
3. Set up e-mail; read, write, save e-mail and send attachments
4. Use Internet news resources; Register with a listserv/discussion group
5. Find answers to questions posed on your web-page topic
6. Compare/contrast search engines
7. Create and publish your own website

## Course Schedule

- Week 1:** Course Orientation. Introduction to class and review of syllabus. Internet basics and begin surfing the Internet.
- Week 2** Send and receive e-mail. Set-up e-mail account and send attachments. Complete exercises and e-mail attachments to professor. Cover e-mail privacy and dangers of viruses and spam.
- Week 3** Discussion Groups. Learn how to send and read e-mail from discussion groups.
- Week 4** Begin Electronic research. Learn how to use the Internet for research purposes.
- Week 5** Search Engines. Learn about different search engines and how to judge them.
- Week 6** Announce website topics and begin research for website using skills learned in class.
- Week 7** Learn how to judge material found on the Internet.
- Week 8** Website Construction. Learn how to develop web pages using information learned in class, Dreamweaver.
- Week 9** Learn how to create links to other websites and how to gauge the validity of the site to which you are creating a link.
- Week 10** Present websites in class and score the pages of other students for 10% of project grade.

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