

## Technological Competency Goals and Objectives

### Goal I

Graduates will be able to use word processing software to produce academic and professional documents, individually and working in collaboration with others.

### Objectives

They will be able to:

1. define key terms related to word processing.
2. create, edit, and print documents with a word processor using word processing software, demonstrating the ability to manipulate character, paragraph and document formats; check a document's spelling and grammar; use the word processing software's thesaurus; add document headers and footers; and add bulleted and numbered lists to the document.
3. create links to objects from within a document, and embed objects in documents.
4. create and manipulate tables of information in a document.
5. use word processing software to add reference items to an existing document.

## Goal II

Graduates will be able to use electronic spreadsheets to organize, analyze and present data.

### Objectives

They will be able to:

1. define key terms related to electronic spreadsheets
2. sort and enumerate electronic spreadsheet data
3. use spreadsheet functions to perform simple numerical analysis of data, including finding the cardinality (count), minimum, maximum, sum, mean (average), and median of a data set, or a subset of the data that meets specified criteria.
4. organize and format tables of spreadsheet information for both on-screen and printed presentations.
5. create and format pie charts, histograms, line graphs, and X-Y scatter diagrams of spreadsheet information for both on-screen and printed presentations, and describe the appropriate uses of each.
6. embed electronic spreadsheet tables and graphs in other documents, and create links to electronic spreadsheets tables and graphs from other documents.
7. demonstrate how to use Boolean logic and comparison operators in creating conditional statements using electronic spreadsheets.

### Goal III

Graduates will be able to use library information systems.

#### Objectives

They will be able to:

1. use a library's online card catalog to find items in the collection that meet specified criteria.
2. describe the different types of document database systems found in the library, and the appropriate use of each.
3. use a full text database in the Library to retrieve articles on a specified subject.
4. use a document summary database to retrieve information about articles on a specified subject.
5. describe how to locate sources of information using a Web search engine, and to identify the source based on its URL (*Uniform Resource Locator*).
6. describe how to use word processing software to properly cite books, articles from periodicals such as professional journals, and Web pages when using information from them in academic and professional papers.
7. describe how to use Boolean logic and comparison operators while searching for items in library information systems.

[note: This objective addresses some of the technological competencies needed for *Information Literacy*. *Information Literacy* itself is covered in English 102, and is not addressed by this competency.]

## **Goal IV**

Graduates will be able to use collaboration and social networking software for academic, professional, and personal use. They will be able to create Web pages from application software documents, and share those documents with others by posting them on the Web.

### **Objectives**

They will be able to:

1. define the terms electronic social networking (or digital social networking) , blog, and wiki.
2. create a personal Web-based blog, add entries to the blog, and leave comments on other people's blogs.
3. collaborate with others in an electronic environment (e.g. use wiki software).
4. list and describe several commonly used social networking sites.
5. create a Web page or set of Web pages from commonly used office applications software.

## **Goal V**

Graduates will be able to connect personal computers to related equipment, such as printers, cell phones, PDAs (Personal Digital Assistants) and digital cameras, and to a wireless computer network in a secure manner.

### **Objectives**

They will be able to:

1. define key terms related to networking and mobile computing.
2. describe how to connect a computer to a publicly accessible LAN (Local Area Network) using a wireless connection.
3. describe how to connect a commonly used device, such as a printer, to a personal computer.
4. describe how to connect a hand-held device, such as a cell phone, iPod, or PDA, to a personal computer and move data from one to other.
5. describe how to determine if a wireless network is secure, and to secure a wireless home network from outside intrusion, and the importance of such protection.

## **Goal VI**

Graduates will demonstrate an understanding of common ethical issues related to the use of information technology system and the handling of data, including privacy and security issues.

### **Objectives**

They will be able to:

1. describe the College's policies for the use of academic computing networks, and comment on the rationale and importance of such policies.
2. describe some of the ethical, legal and security issues related to handling private, personal and proprietary data.
3. describe the ethical responsibilities of systems administrators and individual users in securing computer systems and backing up important data.
4. briefly describe at least one example of legislation related to information technology ethics, such as a the Family Educational Rights and Privacy Act (FERPA) regulations, and why they are important.
5. describe the ethical, security, and privacy issues involved in posting information about yourself and others on social networking sites, including blogs.