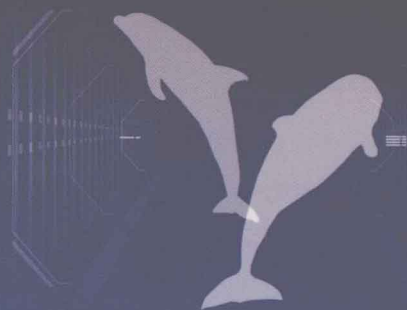


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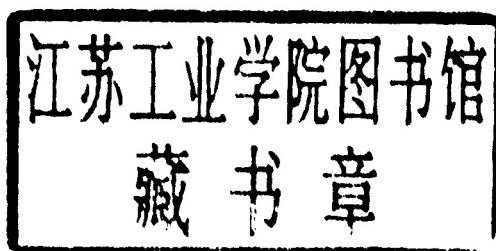
FOURTH EDITION

Internet Literacy

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Fred T. Hofstetter

University of Delaware



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Internet Literacy

FOURTH EDITION

Dedication

This book is dedicated to the memory of the four people who made my childhood special: Aunt Irene, Uncle Guy, and Grandma and Grandpa Jones. Never was a child shown more love, caring, and devotion. I wish every child could be so fortunate as to have such super relatives.

In Memoriam Amantem

Irene Trenor Landerman, 1899–1969

Guy N. Landerman, 1896–1965

Benjamin F. Jones, 1896–1971

Margaret E. Trenor Jones, 1904–1996

Introduction

Internet is the buzzword of the millennium. Never before has a technology spread so rapidly. Never has an invention enabled so many people to do so many things—things that are strategically important to life in the information society. So strategic that being able to use the Internet has become a basic skill. So important that understanding the Internet and knowing how to communicate over it have become a literacy.

Internet literacy is what this book is about. The goal is to provide a course of study that will enable students to acquire the conceptual background and the online skills needed to become Internet literate. An important feature of this book is the way it avoids unnecessary jargon and computer terms. By focusing on the tasks that an Internet literate person should be able to accomplish, and by using software that makes those tasks easy to accomplish, this book provides a course of instruction that any college student, adult learner, or motivated high school student can successfully complete. Working through this book will enable students to use the Internet in their daily lives and become intelligent consumers of information.

Another key feature is the way this book teaches the student how to create Web pages and publish them on the World Wide Web. After learning how to use Internet search engines to conduct research, students complete a Web page creation tutorial that steps through the process of online writing and documenting Internet resources with proper bibliographic style. Thus, the student becomes a creator and a publisher, not just a consumer, of the Internet. Along the way, the student creates a home page and a Web page résumé. Several students have reported that putting their résumé on the Web helped them find jobs.

The course is organized into seven parts. Part One defines the Internet and explains how it is changing the world. After defining the basic Internet services of electronic mail, listserv, newsgroups, chat, instant messaging, videoconferencing, FTP, multimedia streaming, the World Wide Web, RSS, and blogging, the book explains how they are being used across a broad range of industries to provide people with important new capabilities, including telecommuting, home shopping, online learning, government services, and interactive television. Especially relevant to college students are the sections on teaching, learning, and interconnected scholarship.

Part Two covers the logistics of getting connected to the Internet. Students learn about Internet service providers and how to connect via telephone modems, Ethernet, ISDN, DSL, satellite, or cable modems. Then the students go online and learn how to surf the Net using a World Wide Web browser. The tutorial teaches the theory of surfing without getting too technical. By learning the principles of surfing, students learn how to go places and find things that casual users are unlikely to discover.

In Part Three, students learn how to communicate over the Internet, first through electronic mail, and then via listservs, newsgroups, and forums. Step-by-step tutorial exercises allow students to practice key concepts and develop online skills. A chapter on Internet etiquette covers rules, courtesies, and ethics that all users should observe when communicating online.

Part Four is a tutorial on how to use Internet search engines to find things online via subject-oriented searches, keyword searching, natural language searches, and

metasearching. Students learn how to search scholarly databases of refereed articles as well as more general sources. In addition to searching for text, students learn how to conduct multimedia searches for pictures, animations, audio, and video. A special section on peer-to-peer file sharing sensitizes students to the ethics of sharing copyrighted works over the Internet.

In support of online writing, students learn the proper bibliographic style for citing Internet resources. MLA, APA, and CMS styles are covered. Because almost anyone can learn how to publish information on the Web, this book encourages the students to question the source and evaluate the information before citing it.

In Part Five, students learn how to establish a presence on the Internet by creating Web pages and mounting them on the World Wide Web. A chapter on Web page creation strategies helps students choose the proper tool for the task at hand. A chapter on Web page design teaches screen design principles and shows how to lay out Web page elements effectively. Then students learn how to create a home page and a Web page résumé and publish documents on the Web. By linking their home page to their résumé and to other online resources, students experience how hyperlinks can create a world of interconnected scholarship.

Part Six brings the students' Web pages to life by showing how to use multimedia on the Internet. After making a waveform audio recording, students learn how sounds, movies, and animations can be linked to Web pages and made to play via different kinds of multimedia controllers and streaming technologies. Then the book provides access to a large number of multimedia creation tools for making active Web pages.

Even though the Internet has already become an essential part of life in the information society, the Net still is in many ways an emerging technology that is inspiring debates about how it should evolve and become regulated. Accordingly, Part Seven gets the students involved in planning for the future of the Internet by discussing and debating the societal issues of equity, privacy, security, protectionism, censorship, decency, copyright, and Fair Use. Then students learn about the emerging technologies of the multimedia backbone, Internet talk radio, the real-time streaming protocol, artificial intelligence, voice recognition, text-to-speech conversion, image recognition, robots, intelligent agents, videoconferencing, Internet phone services, Webcasting, virtual reality, wireless communications, digital hubs, and Internet PCs.

The book concludes by showing students how to use the Internet for continued learning about the exciting new products that will be invented during the coming decades. The best listservs, newsgroups, and Web sites for keeping up with this fast-paced field are identified, and students learn how to subscribe for free. On both Windows and Macintosh platforms, students learn how to subscribe freely to software update services and security newsletters that provide ongoing advice to keep computers protected from viruses, worms, spyware, malicious code, and crackers.

World Wide Web Site

Accompanying this book is an Internet Literacy Web site. It is called the *Interlit* Web site—*Interlit* stands for Internet Literacy. The address of the site is <http://www.udel.edu/interlit>. It provides quick and easy access to all of the Internet resources and examples referred to in this textbook. In addition to making it easy to find things, the *Interlit* Web site can help save you money, because almost all of the resources it uses are available free of charge.

Icons coordinate what you read in this book with what you will find at the *Interlit* Web site. When you see an icon in the margin of this text, you will know that you can go to the *Interlit* Web site for quick and easy access to that item. For example, in the Web page creation

tutorial, where the book provides a layout analysis of exemplary Web pages, the *Interlit* Web site provides hot links that enable you to visit the exemplars and try them out.

End-of-Chapter Exercises

Throughout the course, end-of-chapter exercises provide practical, hands-on assignments for students to complete outside of class. The instructor can adjust the depth and rigor of the course by deciding which assignments to require. Highly motivated students can go ahead and complete all of the exercises, to harness the full potential of the Internet.

Situated Case Projects

At the end of the exercises in each chapter is a special section containing situated case projects. These projects are called situated because they present the student with real-world problems. The student imagines being employed in a small company or school that is planning how to use the Internet to improve daily operations. After completing each chapter, the student applies its content to solving a real-world need or problem related to the use of information technology in the workplace. The case projects are optional and need not be done in sequence. For a quick course about the Internet, the case projects can be skipped. Longer courses can use some or all of the cases to deepen understanding by immersing students in the solution of real-world problems in the workplace. Appendix B contains an outline of the situated case projects.

Basic Windows and Macintosh Tutorials

At six strategic locations in this book, Windows and Macintosh tutorials have been provided for inexperienced students who may need help completing basic computing tasks. The tutorials are presented at the point where students will first need them. For students or instructors who want to locate the basic Windows and Macintosh tutorials at other times, Appendix C shows where to find them.

What You Will Need to Use This Book

Internet Literacy works on both Windows PCs and Macintoshes with all of the leading Web browsers, including Microsoft Internet Explorer, Netscape Navigator, Safari, and Mozilla Firefox. In order to complete the exercises and tutorials in this book, the student will need to have access to a Web browser that is running on a Windows PC or a Macintosh. The student also will need an Internet account that provides the basic Internet services of e-mail, newsgroups, FTP, and the Web. Students who do not already have Internet access should refer to Part Two of this book, which provides a detailed explanation and comparison of the options for getting connected to the Internet. While high-speed connections work best, all of the exercises in this book can be completed via modem over an ordinary telephone line.

Internet Toolkit

By working through the tutorial exercises in this book, the student will acquire a toolkit full of utilities for authoring Web pages, manipulating images, recording and editing sound, creating animations, and maintaining a Web site. Appendix A lists the utilities used in this book. Any of these utilities that the student does not already have can be downloaded from the *Interlit* Web site. Utilities are provided for both Windows and Macintosh computers.

Dreamweaver, FrontPage, and Mozilla Downloads

In the Web page creation tutorial that begins in Chapter 18, you will have your choice of using either Macromedia Dreamweaver, Microsoft FrontPage, or Mozilla Nvu. If you do not already own a copy, you can get a free trial version by following these links:

Dreamweaver: www.macromedia.com/software/dreamweaver/download

FrontPage: www.microsoft.com/office/frontpage/prodinfo/trial.msp

Mozilla Nvu: www.nvu.com

If you plan to use the trial version of Dreamweaver or FrontPage, please understand that it will expire after the trial period. You should therefore not install it until you are actually ready to begin working on the exercises in Chapter 18. The Mozilla download, on the other hand, will not expire. As open source software, the Mozilla Nvu program is freely downloadable, so you do not need to pay anything if you decide to keep using it.

If do not know how to decide which software to use, read Chapter 15, which discusses Web creation strategies and provides more information on Macromedia Dreamweaver, Microsoft FrontPage, and Mozilla Nvu.

Acknowledgements

I have many people to thank for making this project possible, but most of all, I want to acknowledge my students, who inspired this book through their enthusiastic participation in the experimental courses that were the precursors to what we now know as *Internet Literacy*. I learn more from my students than from anyone else, and I look forward to every class, not so much to teach, as to learn.

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