1. Abraham Silberschatz and Peter Baer Galvin, "Operating System Concepts"; (Book) Addison Wesley; 1999. This is a standard text in many Universities around the globe. Chapters 4 through 11 cover much of the process management and memory management. Some websites carry the lecture notes prepared based on this text.

2. Aleen Frisch, "Essential System Administration"; Chapter-19; O'Reilly and Associates, Inc., (1998). An excellent introduction to system administration. It explains the startup and shutdowns very well. It also has a nice chapter on security which covers how the file systems is protected. You may wish to look it up for network file systems NFS as well.

3. Alfred V Aho, Brian W. Kernighan and Peter J. Weieberger, "The AWK Programming Language"; (Book); Addison Wesley, (1978). This was the first book written by the original authors of AWK programming language. It is not only readable for its clarity but also offers many insightful examples as well.


5. Amoroso Edward, "Intrusion Detection"; (Book) Intrusion.Net books; (2001). This book describes intrusion detection system architectures. It specially emphasizes the need for keeping a systems log and profiling users to detect malicious intrusions. Like Amoroso's earlier book, this too is very readable.

6. Andrew S. Tanenbaum, "Modern Operating Systems"; Prentice Hall of India; (2001). This is a very readable book. One of the strengths of the book is that it is written by a person who has designed operating systems. Andrew brings out all the major design issues very succinctly. The sections on case studies are extremely well written. It also gives how logically Unix and MS-DOS evolved over time. At the conceptual level, it motivates to attempt newer designs. It has a nice chapter on Amoeba.

7. Andrew S. Tanenbaum and DeBoelelan, "The Amoeba Microkernel"; A technical report available from Vrije University, Amesterdem This is a must read report for anyone interested in learning about micro-kernels and real-time concerns.


complete listing of system call library functions with their inter relationships. It advocates configuration management by suitably tailoring the library functions to meet the requirements of a real-time system.

This book emphasises OS design. It uses C++ code segments to explain the design of OS components. Chapter 5 of the book is highly recommended reading. It deals with the basics in developing an architecture of an OS.

A very well-written book. The book has several programs to demonstrate the use of inter-process communication mechanisms. It also describes how tasks may be split to have distributed programming. In addition, it has a detailed discussion on client server programming.

13. Craig Hollabaugh, "Embedded Linux" (Book); Pearson Education (2002).
This is a book that uses one running example. It takes one through all the basic steps. The steps begin with installation of Linux and carry through to the way device drivers are written. It shows how embedded OS operates to meet an application's performance requirements. One feels very comfortable reading it because the book gives first-hand implementation experience.

With SED and AWK it indicates how tools in Unix may be employed to a variety of situations. It also has a nice chapter on scripts in AWK.

A somewhat outdated book now. It has two nice chapters. One deals with real-time languages and the other with software development process.

This is a very readable book and emphasises the role of tools in Unix. I found that it develops the material very logically. My students in Japan and Germany found this book very motivating. Unfortunately, it is not easily available in India.

A very comprehensive survey of the real-time system design methodologies. It also offers tremendous insight into the selection of scheduling policies through various simulations.

The first book from which I learned about Unix. The discussion on tools like SCCS, Makefile and kernel is still well worth a read.

19. Lawrence Jenkins, "Real-time OS"; IEEE one day workshop, Bangalore, Sept. 2002.
The workshop discussed the rate monotonic and earliest deadline first scheduling policies in the context of hard, firm and soft deadlines in real-time systems.

20. Patrick Volkerding, Kevin Richard and Eric Foster Johnson, "Linux Configuration and Installation"; (Book); M&T books (CA) (1999).

Clearly, this is a book specifically promoted for the Sun Solaris system. Even then, it presents many security tools commonly used. Sun is well known for its
pioneering work done on NFS. There is quite an elaborate discussion on network access control and security vulnerabilities in domain name services.

22. Phillips Zimmermann, "Pretty Good Privacy"; (Book) MIT Press (1996). This is a book which is a landmark publication as its publication itself stood ground against odds, for free information exchange. Technically, Zimmermann shows how the PGP can be useful for a common user to ensure his privacy in communication.

23. Robert Kiesling (Editor), "The Linux Documentation Project"; (Book) Linux Systems Laboratory (2000) www.lsl.com. This is a complete reference book giving answers to "How To" questions. Each chapter is written by an expert and has detailed explanation.


25. Roopa Yavagal, Asoke Talukder and P.C.P. Bhatt, "Mobile Computing"; (Book); (2003). This manuscript is presently under preparation. It deals with both the technologies and techniques for mobile computing on handheld devices.

26. Simson Garfinkle and Gene Spafford, "Practical Unix and Internet Security"; (Book) O'Reilly and Associates, Inc. (1998). The book describes what are the typical access concerns from the security point of view. It also describes cryptography, albeit brieﬂy. It also covers internet security for TCP/IP as well as the Web. It has a good coverage on Sun's security mechanisms.


28. Steven W. R., "Unix: Network Programming"; Book(1990). Prentice Hall of India. Most professionals regard this book as the bible of network programming. It has a very thorough discussion of Unix model and programming. It also describes the network support for IPC. It has details on sockets and the library of functions and how to use it for network programming.

29. Strang John, Mui Linda and O'Reilly, "termcap and terminfo"; (Book) O'Reilly and Associates, Inc. (1998). A book very specific to terminal settings information and database. It is perhaps the only guide in this specific area.

30. V.S. Sunderam, "PVM : A framework for parallel distributed computing"; (Book) MIT Press (1994). Emphasises the PVM paradigm for concurrency and parallel programming. There is also a separate users-guide and tutorial on PVM from MIT Press with Sunderam as one of the authors.