Bibliography for CS50, Introduction to Computer Science,
for the fall 1996 term.

Required course texts:

Eric S Roberts
The Art and Science of C
Addison-Wesley, 1995
isbn 0-201-54322-2

Brian W Kernighan and Dennis M Ritchie
The C Programming Language, 2nd edition
Prentice Hall, 1988
isbn 0-13-110362-8

Douglas E Comer
The Internet Book
Prentice Hall, 1995
isbn 0-13-131565-9
a bit dated, e.g., little on the web
but detailed and specific about how networking really works,
unlike most other internet books

Recommended course texts:

Brian W Kernighan and Rob Pike
The Unix Programming Environment
Prentice Hall, 1984
isbn 0-13-937681-X
getting dusty, unfortunately

Grace Todino, John Strang, Jerry Peek
Learning the Unix Operating System, 3rd edition
O'Reilly & Associates, 1993
isbn 1-56592-060-0
really abbreviated intro, for real novices

ancillary books worth reading, though not necessarily worth buying

programming:

the elements of programming style
kernighan & plauger, mcgraw hill, 1978
good advice, but fortran & pl/1 examples only

writing solid code
steve maguire, microsoft press
lots of excellent advice; very practical & realistic
his "debugging the development process" is also worthwhile

deep c secrets
van der linden, prentice hall
good advice and explanations, fun reading

programming pearls
more programming pearls
jon bentley, addison-wesley
lots of good advice in bite-sized chunks

the mythical man month

fred brooks, addison-wesley
getting dusty, but still good advice from someone who
managed a really large project.  the most eloquent
statement i've seen of why programming is fun and hard.

advanced programming in the unix environment
w richard stevens, addison wesley
system-call level with examples; great reference

obfuscated C and other mysteries
don libes, wiley&sons
perverse beyond words, but fun

internet:

internetworking with tcp/ip vol 1; 3rd edition
doug comer, prentice hall
a good technical intro to how the internet works
vols 2 & 3 are also good

tcp/ip illustrated, vol 1 & 2
w richard stevens, addison-wesley
more code, excellent descriptions

zen and the art of the internet
brendan kehoe
3rd ed, 1996.
pretty superficial, dated (in spite of date)
too much a laundry list of addresses

ed krol
the whole internet
o'reilly assoc
the win95 version is much more current
less superficial than kehoe but still a user-level book

java:

java in a nutshell
david flanagan; o'reilly
for programmers, not web site designers.  good examples,
lots of realistic code, plausible library reference.
very inexpensive; the best buy i've seen.

computer architecture, etc:

david a patterson & john l hennessy
computer organization & design: the hardware/software interface
morgan kaufmann publishers, 1994
isbn 1-55860-281-x
and other books by the same authors.  solid, authoritative,
very well written.