## Lecture Syllabus—Spring 1998

| Wk | Dates | Text | Topics Covered |
|---|---|---|---|
| 1 | Jan 13, 15 | 1, 2 | Introduction, course organization. Several sample C programs. Overview of computer systems, high-level languages, compilers. **[First class is Jan 13]** |
| 2 | Jan 20, 22 | 2, 3 | Simple data types, computer memory, assignment statement, constant and variable declarations, step-by-step problem solving. Arithmetic operators, simple input and output of data.<br>**[Jan 19 is MLK Day.]**<br>**[Program 1 (copy) due Jan 22.]** |
| 3 | Jan 27, 29 | 3, 4, 6 | Simple output formatting, redirection of input and output, functions without parameters, functions with a single value parameter, if, if-else, and nested if-else.<br>**[Program 2 (modify copy) due Jan 29.]** |
| 4 | Feb 3, 5 | 5 | Switch statement, testing, debugging, errors, compilation, syntax and semantics, milestones, test output, while loops.<br>**[Program 3 (simple if-then) due Feb 5.]** |
| 5 | Feb 10, 12 | 5, 6 | More loop examples, for statement. Functions with parameters.<br>**[Program 4 (loops) due Feb 12.]** |
| 6 | Feb 17, 19 | 6 | More functions and parameters with examples. The char data type, logical expressions and operators.<br>**[FIRST EXAM Feb 17.]** |
| 7 | Feb 24, 26 | 6 | Continuation with examples.<br>**[Program 5 (complex logic, loops) due Feb 26.]** |
| 8 | Mar 3, 5 | 7 | Arrays, search and sort.<br>**[Program 6 (includes functions) due Mar 5.]** |
| 9 | Mar 10, 12 | 7, 8 | Continue search and sort, strings.<br>**[Last day to drop: Mar 13.]**<br>**[Program 7 (more functions) due Mar 12.]** |
| | | | **[Mar 16–20 is Spring Break.]** |
| 10 | Mar 24, 26 | 7 | Two-dimensional arrays.<br>**[Program 8 (includes arrays) due Mar 26.]** |
| 11 | Mar 31, Apr 2 | 7, 8 | Binary search, strings.<br>**[SECOND EXAM Mar 31.]** |
| 12 | Apr 7, 9 | 11 | Simple structures.<br>**[Program 9 due Apr 9.]** |
| 13 | Apr 14, 16 | 9 | File input and output.<br>**[Program 10 due Apr 16.]** |
| 14 | Apr 21, 23 | | Leeway.<br>**[Program 11 (includes strings) due Apr 23.]** |
| 15 | Apr 28 | | Review, wrap-up, leeway. **[Study: Apr 30, May 1.]** |

**Note:** Text is *The Art of Programming: Computer Science with C*, by Steven C. Lawlor, West, 1996.
**Programs due: Thursdays.**
**Exams: Tuesdays.**

## Laboratory Syllabus—Spring 1998

| Lab | Dates | Text | Topics Covered |
|---|---|---|---|
| 1 | Jan 13, 15 | 2 | Logging in and changing password. Creating a simple C program using vi. Getting a printout. Trip to the lab. **[First class is Jan 13.]** |
| 2 | Jan 20, 22 | 3 | Sending e-mail. More on vi. The man pages. Trip to the lab. **[Assign: Send lab instructor e-mail.]** **[Jan 19 is MLK Day.]** |
| 3 | Jan 27, 29 | 7 | Newsgroups and the Internet. **[Assign: Post a message to our newsgroup.]** |
| 4 | Feb 3, 5 | 4 | Files and directories. **[Assign: TBD]** |
| 5 | Feb 10, 12 | 8 | Advanced editing. |
| 6 | Feb 17, 19 | 9 | Programming tools: lint, make and dbx. **[Assign: TBD]** |
| 7 | Feb 24, 26 | 10 | Unix shell and command lines. **[Assign: TBD]** |
| 8 | Mar 3, 5 | | More debugging. **[Assign: TBD]** |
| 9 | Mar 10, 12 | 12 | Configuring your environment. **[Assign: TBD]** |
| | | | **[Mar 16–20 is Spring Break.]** |
| 10 | Mar 24, 26 | | Working with strings and pointers. **[Assign: TBD]** |
| 11 | Mar 31, Apr 2 | | In-class drills on advanced parameter passing. **[Assign: TBD]** |
| 12 | Apr 7, 9 | | In-class drills on two-dimensional arrays. |
| 13 | Apr 14, 16 | | In-class drills on arrays and structures. **[Assign: TBD]** |
| 14 | Apr 21, 23 | | Practice for the final. **[Assign: TBD]** |
| 15 | Apr 28 | | **[Study: April 30, May 1.]** |

As well as covering special material during the laboratories, the labs are used to help with assignments, including understanding them and debugging them, and to answer questions.

**Note:** The text is *Unix System V: A Practical Guide*, 3rd Edition, by Mark G. Sobell, Benjamin-Cummings, 1995.