Course Syllabus

CSC 250 Computer Science II, 3 Credits, Internet Section

Dakota State University, Summer 2010

# Instructor information:

Steve Graham

 East Hall 12

605-256-5819 (office)

 605-556-0208 (home)

 605-480-6603 (cell)

 skg@dsu.edu

## Office hours:

Since this is an Internet course, I will not have regularly scheduled office hours. I will plan to be available at some times via chat or eliminate – details to be determined.

## Catalog description:

Problem solving, algorithm design, standards of program style, debugging and testing. Extension of the control structures and data structures of the high-level language introduced in CSC 150. Elementary data structures and basic algorithms that include sorting and searching. Topics include more advanced treatment of functions, data types such as arrays and structures, and files.

## Additional course information:

**Modifications to the Course:** The instructor reserves the right to make adjustments to this syllabus during the course of the semester in order to better meet the needs of the students.

## Prerequisite(s):

CSC 150 Computer Science I

## Technology skills:

Students will be required to learn and use software as needed, including Cygwin, one or more text editors, and gcc. Classroom assignments and materials will be posted on D2L. Participation in online class discussions will be required. Other technology software and skills will be addressed in the course.

## Required textbook(s):

Programming in C: A complete introduction to the C programming language. Third Edition.
Stephen G Kochran
ISBN-10: 0672326663
Sam’s Publishing Copyright 2005

## Supplementary materials:

 See <http://homepages.dsu.edu/grahams> and click on the resources link at the top of the page.

<http://publications.gbdirect.co.uk/c_book/>

<http://www.cygwin.com/>

<http://notepad-plus.sourceforge.net/uk/site.htm>

# Course delivery and instructional methods:

Video recordings will address course mechanics and examples/demonstrations for key topics from the text. Students will be responsible for reading the text, watching the videos, participating in online discussions of the material, writing and debugging programs relevant to the course material, and making use of additional online resources to support their course work.

# Classroom policies:

## Attendance and make-up policy:

There is no attendance per se. Assignments and exams will be made available with one week (or more) of lead time. If there is a period during the summer where your access to the internet or ability to work on assignments is compromised for a period of a week or more, contact the instructor prior to missing deadlines to arrange for extensions.

## ADA Statement:

If you have a documented disability and/or anticipate needing accommodations (e.g., non-standard note taking, test modifications) in this course, please contact the instructor. Also, please contact Dakota State University’s ADA coordinator, Keith Bundy (located in the Student Development Office in the Trojan Center Underground or via email at Keith.Bundy@dsu.edu or via phone at 605-256-5121) as soon as possible. The DSU website containing additional information, along with the form to request accommodations is available at <http://www.departments.dsu.edu/disability_services/>. You will need to provide documentation of your disability. The ADA coordinator must confirm the need for accommodations before officially authorizing them.

## Academic Honesty Statement:

Cheating and other forms of academic dishonesty run contrary to the purpose of higher education and will not be tolerated in this course. Please be advised that, when the instructor suspects plagiarism, the Internet and other standard means of plagiarism detection will be used to resolve the instructor’s concerns. DSU’s policy on academic integrity ([DSU Policy 03-22-00](http://www.departments.dsu.edu/hr/newsite/policies/032200.htm)) is available online.

All forms of academic dishonesty will result in no credit on the assignment. If you copy from another or allow another to copy from you, you have cheated. A formal acknowledgement that you violated academic integrity policies will be placed in your permanent academic records. If there is a second offense by the same student(s), they will fail the course.

## Freedom in Learning Statement:

Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. It has always been the policy of Dakota State University to allow students to appeal the decisions of faculty, administrative, and staff members and the decisions of institutional committees. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should contact the dean of the college which offers the class to initiate a review of the evaluation.

## University Policy Regarding the Use of Tablets in the Classroom:

The Tablet PC platform has been adopted across the DSU campus for all students and faculty, and tablet usage has been integrated into all DSU classes to enhance the learning environment. Tablet usage for course-related activities, note taking, and research is allowed and encouraged by DSU instructors. However, inappropriate and distracting use will not be tolerated in the classroom. Instructors set policy for individual classes and are responsible for informing students of class-specific expectations relative to Tablet PC usage. Failure to follow the instructor’s guidelines will hinder academic performance and may lead to disciplinary actions. Continued abuse may lead to increased tablet restrictions for the entire class.

Because tablet technology is an integral part of this course, it is the student’s responsibility to ensure that his/her Tablet PC is operational prior to the beginning of each class period.

# Course Goals:

* To use sequential, selection, and repetition structures to design programs
* To understand the purpose of the function declaration, call, and definition
* To design and implement programs using multiple functions
* To be able to declare, define, and initialize pointers and understand their relation to arrays
* To write programs that read, write, and manipulate strings
* To write programs with perform input and output
* To understand the classical approaches to sorting arrays

# Evaluation Procedures:

## Assessments:

This course will consist of four online exams throughout the semester.

## Final Due Date for all online exams and submissions:

Monday Aug ???, 2010

## Performance standards and grading policy:

|  |  |  |
| --- | --- | --- |
| Exams | 4 online exams (100pts each) | 40% |
| Assignments | 5 x 80 points | 40% |
| Discussion | Everyone must post 20 or more relevant, substantive messages to the discussion board (at least two posts every week.) | 20% |

**Grading Scale**

A 90 – 100
B 80 – 89
C 70 – 79
D 60 – 69
F 0 - 59

# Tentative Course Outline and Schedule (6 Week):

\*This is a tentative course outline the instructor reserves the right to modify it.

| Week | Date | Topics, Readings, Assignments, Deadlines |
| --- | --- | --- |
| 1 |  | Introduction to the CourseReview of variables, selection, repetition |
| 1 |  | Functions |
|  |  |  |
|  |  |  |
| 2 |  | Arrays |
| 2 |  | Character Strings |
| 2 |  | Exam1 |
| 2 |  | Project 1 |
|  |  |  |
| 3 |  | more functions |
| 3 |  | Pointers |
| 3 |  | Project 2 |
|  |  |  |
| 4 |  | More pointers |
| 4 |  | Input and Output Operations |
| 4 |  | Exam 2 |
| 4 |  | Project 3 |
|  |  |  |
| 5 |  | More I/O |
| 5 |  | structs  |
| 5 |  | Exam 3 |
| 5 |  | Project 4 |
|  |  |  |
| 6 |  | Bit operations |
| 6 |  | Miscellany |
| 6 |  | Exam 4 |
| 6 |  | Project 5 |

# Tentative Course Outline and Schedule (12 Week):

\*This is a tentative course outline the instructor reserves the right to modify it.

| Week | Date | Topics, Readings, Assignments, Deadlines |
| --- | --- | --- |
| 1 |  | Introduction to the CourseReview of variables, selection, repetition |
| 2 |  | Functions |
|  |  |  |
|  |  |  |
| 3 |  | Arrays |
| 2 |  | Exam1 |
| 3 |  | Project 1 |
| 4 |  | Character Strings |
|  |  |  |
| 5 |  | more functions |
| 6 |  | Pointers |
| 6 |  | Project 2 |
|  |  |  |
| 7 |  | More pointers |
| 7 |  | Exam 2 |
| 8 |  | Input and Output Operations |
| 8 |  | Project 3 |
|  |  |  |
| 9 |  | More I/O |
| 9 |  | Exam 3  |
| 10 |  | Structs |
| 10 |  | Project 4 |
|  |  |  |
| 11 |  | Bit operations |
| 12 |  | Miscellany |
| 12 |  | Exam 4 |
| 12 |  | Project 5 |