CSCI 340 **Course Syllabus** **Fall 2017**

Data Structures and Algorithm Analysis

Course Description:

The application of analysis and design techniques to nonnumeric algorithms on data structures. The utilization of algorithmic analysis and design criteria in the selection of methods for data manipulation. PRQ: CSCI 241

Textbooks:

- The C++ Standard Library: A Tutorial and Reference, 2nd edition, Nicolai M. Josuttis, Addison Wesley, 2012 (required)
- Data Structures and Algorithms in C++, 4th edition, Adam Drozdek, Cengage Learning, 2013 (recommended)

Assignments:

There will be several computer assignments in programming language C++. These assignments need to be coded, tested, run, and debugged on the Computer Science Department's **tiger** machine.

You must include the following information (in the form of a "Doc.–Box") at the top of each computer assignment that you turn in for grading:

a) Your name,
b) The assignment number, and
c) The date the assignment is due.

The course TA will grade all computer assignments. When your assignment is ready, submit the source codes of your computer assignment to your TA for grading. If you have any questions about grading of one of your assignment, or if you do not agree with the way that one of your assignment is graded, you must confer with your TA first. If you're still not satisfied with your grade, bring your graded assignment to your instructor. On reviewing your assignment, your instructor may assign a grade differs from the one given by your TA. The new grade may be higher or lower than the grade given by your TA.

The maximum grade that you can receive for a late assignment will be reduced by **10 %** of the maximum possible points for each day – includes weekends and university holidays – that the assignment is late.

Computer assignments will be graded using the following criteria:

a) Program output and compliance with the stated objectives and specification of the assignment => 60 %
b) Structure and efficiency => 20 %

c) Documentation => 20 %

Any computer assignment that is submitted for grading that contains any compile–time errors receives zero points and not accepted if it's more than three days late.

Grading:

The letter grade assigned for this course at the end of the semester will be based on a scale of **70 %** for in-class tests and **30 %** for computer assignments.

Course Web Site and Emails:

Hard copies of handouts of computer assignments will not be available, but they will be posted as PDF files on the course website. Also, any additional information for an assignment can be posted on the course website or sent to you by an email, so you are responsible of checking the course website and your emails daily.

Attendance:

You're responsible for all material presented in class. If you miss a lecture, be sure to obtain class notes from a classmate before the next class meeting.

Independent Work:

Everything that you do in this course must reflect your own work. If you copy all or part of another student's work, no matter where or how you get it, it will be considered as an act of cheating. This is not to discourage discussions among classmates. However, discussions should not be as extensive and detailed as to border on collaboration.

Cheating of any form cannot be tolerated. Any student caught on cheating will receive a grade of an **F** for the course with possible disciplinary action from the university.

Persons with Disabilities:

If you need an accommodation for this class, please contact the Disability Resource Center (DRC) as soon as possible. The DRC coordinates accommodations for students with disabilities. It is located on the 4th floor of the Health Services Building, and can be reached at 815–753–1303 (V) or drc@niu.edu. Also, please contact us privately as soon as possible so we can discuss your accommodations. The sooner you let us know your needs, the sooner we can assist you in achieving your learning goals in this course.