

**CSC 321 – Design and Analysis of Algorithms**  
**Spring 2012-2013**  
**Prof. Marrero**

**Course Summary**

This course covers techniques for designing and analyzing algorithms including: big theta notation, recurrence relations, divide-and-conquer, greedy method, dynamic programming, and backtracking. These topics will be explored using well known algorithms and students will be expected to implement some algorithms themselves.

**Prerequisites**

The prerequisites for this course are data structures (CSC301 or CSC383 or CSC393) discrete math I (MAT140). Discrete math II (MAT141) is recommended.

**Grading Policy**

Course grades will be computed using the following weights for the exams and homework:

Homework	50%
Midterm	20%
Final	30%

Overall grades will be assigned as follows:

93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
60-66	D
0-59	F

**Textbooks and Printed Resources**

The required text for the course is:

*Algorithms.*

Johnsonbaugh & Schaefer.

Prentice Hall, 2004.

ISBN: 978-0023606922

## **Exams**

The midterm exam is a take home exam. The allowed resources/references for the midterm exam are the textbook for the course, personal notes taken during class, and all content posted on the D2L site for the class. In addition, students are allowed to discuss the midterm problems among themselves, but each student must write up and submit their own answers to the midterm exam.

The final exam is on week 11 in the usual classroom and at the usual time, although the exam period is only 2 hours instead of 3. The exam is closed book but students may bring a single 8.5" by 11" sheet of notes (both sides) to the exam. This sheet of notes will be collected so make yourself a copy beforehand if you want to have one. Students in the "live" section must take the exam on the usual class day (June 11). Students in the online section must take the exam on June 11 or June 12 and must make arrangements to have their exam proctored by an acceptable proctor. Please make sure to read and abide by the online learning policies found at <http://www.cdm.depaul.edu/onlinelearning/Pages/OnlinePolicies.aspx>

## **Homework**

Students may work together in groups of at most 2 students. If you work in a group with another student, both of you must submit on D2L and both of you must indicate in the comment section that you worked as a group.

All homework is submitted via the D2L system and is due before class begins. On programming assignments, students must submit their source code (the .java files). Failure to do so will result in a grade of 0. Written assignments may also be given. The turn in for written assignments will be either a doc, docx, or pdf file submitted via D2L similar to how your programs are submitted, or via completing an online quiz in the quiz area of the D2L site for the course.

*Additionally*, most if not all programming assignments will be graded automatically online via a test server. On programming assignments, students are required to run their programs against the test server by compiling their code together with a TestClient.java file I will provide and then running the TestClient.class file at the command line. Your computer must be able to open a network connection to my server in order to receive a grade as well as feedback on your solution. Make sure that no firewalls are blocking the connection. You can also always run on a CDM machine. A demo of this process will be given in class.

Homework deadlines are strictly enforced. In general, homework must be submitted before class (before 5:45PM server time) on the day it is due to receive credit. However, since some of the programming assignments can be challenging, programming assignments have a 1 week late period during which an assignment can still be submitted but with a 20 point penalty. The grading server will be disabled when class starts. Usually by the next day, the server will be started up again, but submissions during the following week (again with a 5:45PM deadline) will be scored with a 20 point penalty.

## **Important Note to Online Students**

If you believe you are an online student, check right now that you have the ability to register for the final

exam on COL. If you cannot do so, you are in the live section of the course and must take the exam in the regular classroom at the regular time. If this is not possible for you, you must switch over to the online section as soon as possible because administration will not allow you to take a proctored exam if you are registered in the live section of the course.

### **Online Teaching Evaluation**

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation.

### **Email**

Email is the primary means of communication between the instructor and students enrolled in this course outside of class. All students must make sure that the email address listed for them under "demographic information" on campus connect is correct.

### **Academic Integrity Policy**

This course will be subject to the faculty council rules on the [Academic Integrity Policy](#)

### **Plagiarism**

The university and school policy on plagiarism can be summarized as follows: Students in this course, as well as all other courses in which independent research or writing play a vital part in the course requirements should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work a report, examination paper, computer file, lab report, or other assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

Note that for this class, copying code from other students past or present (other than at most the two other students in your group) or from books or online resources is also considered plagiarism.

### **Incomplete**

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.

**Resources for Students with Disabilities**

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you contact the Center for Students with Disabilities (CSD) at:

Student Center, LPC, Suite #370

Phone number: (773)325.1677

Fax: (773)325.3720

TTY: (773)325.7296