

Analysis of Algorithms, 40846 - CS 483 - C01

Fei Li*

- LECTURE TIME

June 25 - July 28: Monday, Wednesday, Friday: 1:20pm-4:20pm

- LOCATION

Innovation Hall 204

- COURSE WEBPAGE

<http://cs.gmu.edu/~lifei/teaching/cs483summer18/syllabus.pdf>

- CREDIT

3

- TEXTBOOK

Algorithm Design, by Jon Kleinberg and Eva Tardos, 2006.

- PREREQUISITES

Grade of C or better in CS310, CS330 and MATH125

- OFFICE HOURS

By appointment

- TA: TBD

- **email:**

- **office:**

- **office hours:**

- GRADING POLICY:

- **assignments** (60%)

- **a final exam** (40%)

- [95, 100] : *A+*; [90, 94] : *A*; [85, 89] : *A-*; [80, 84] : *B+*; [75, 79] : *B*; [70, 74] : *B-*; [65, 69] : *C*; [0, 64] : *F*

- SYLLABUS (to be updated over time)

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Lectures	Topics	Dates	Chapters	Reading assignments
1	introduction	06/25	1	representative problems
2	some background			
3	basic	06/27	2	basic
4	basic			
5	graph	06/29	3	graphs
6	graph			
7	greedy	07/02	4	greedy I
8	greedy			greedy II
9	greedy	07/06		
10	greedy			
11	divide and conquer	07/09	5	divide and conquer I
12	divide and conquer			divide and conquer II
13	divide and conquer	07/11		
14	divide and conquer			

Lectures	Topics	Dates	Chapters	Reading assignments
17	dynamic programming	07/13	6	dynamic programming I
18	dynamic programming			
19	dynamic programming	07/16		dynamic programming II
20	dynamic programming			
21	dynamic programming	07/18		
22	dynamic programming			
23	network flows	07/20	7	network flow I
24	network flows			
25	network flows	07/23		network flow II
26	network flows			network flow III
27	network flows	07/25		
28	network flows			
	final exam	07/27 (1:30pm-4:15pm)		

- POLICIES

Please note that all coursework is to be done independently. Plagiarizing the homework will be penalized by maximum negative credit and cheating on the exam will earn you an F in the course. See the GMU Honor Code System and Policies at George Mason University Honor Code.

You are encouraged to discuss the material BEFORE you do the assignment. As a part of the interaction you can discuss a meaning of the question or possible ways of approaching the solution. The homework should be written strictly by yourself. In case your solution is based on the important idea of someone else please acknowledge that in your solution, to avoid any accusations.

- ACADEMIC HONESTY

The integrity of the University community is affected by the individual choices made by each

of us. GMU has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct.

Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

- DISABILITY STATEMENT

If you have a learning or physical difference that may affect your academic work, you will need to furnish appropriate documentation to the Disability Resource Center. If you qualify for accommodation, the DRC staff will give you a form detailing appropriate accommodations for your instructor.

In addition to providing your professors with the appropriate form, please take the initiative to discuss accommodation with them at the beginning of the semester and as needed during the term. Because of the range of learning differences, faculty members need to learn from you the most effective ways to assist you. If you have contacted the Disability Resource Center and are waiting to hear from a counselor, please tell me.