Instructor(s): Aikaterini Potika
Office Location: MacQuarrie Hall 215
Telephone: 408-9245134
Email: katerina.potika@sjsu.edu
Office Hours: Tuesdays 1-2 pm & Wednesdays 9:15-10:15 am (online) or by appointment
Join from PC, Mac, Linux, iOS or Android:
https://sjsu.zoom.us/j/91441895686?pwd=Nlp1aExvU2JtaTNKY3VOblk4NEdjQT09
Password: 793531
Class Days/Time: Monday Wednesday 10:30-11:45 am
Classroom: QH 222
Prerequisites: CS 155 or instructor consent

Randomized algorithms. Parallel algorithms. Distributed algorithms. NP-completeness of particular problems. Approximation algorithms.

The course adopts an online classroom delivery format. An internet connection and a computer and a tablet or smartphone is required.

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU on Spartan App Portal http://one.sjsu.edu (or other communications

-- Given a problem within NP that is promised to be either in P or NP-complete prove which it is

-- Analyze or code a number theoretic algorithm

-- Analyze or code an approximation algorithm for an optimization problem whose decision problem is NP-complete.

No required textbook we will use chapters from various books:

1. Cormen, Leiserson, Rivest and Stein, Introduction to Algorithms, 3rd Edition MIT Press, 2009. You can find errata (bug reports) for the book http://www.cs.dartmouth.edu/~thc/clrs-bugs/bugs-3e.php.
2. Kleinberg and Tardos, Algorithm Design, First edition, Addison Wesley

No extra point options (only the final exam offers extra points option).
All exams are closed book, and the final exam is comprehensive. No make-ups exams except in case of verifiable emergency circumstances.

Determination of Grades

Final Grade:
25% Project (programming and presentation)
5% Quizzes
10% Homework

talking or whispering with other s

9/19	Divide & Conquer: sorting, integer/matrix multiplication, max subarray	
9/21	Divide & Conquer: computational geometry	HW 2
9/26	Dynamic Programming: scheduling, knapsack	
9/28	Dynamic Programming: all pair shortest path	
10/3	Network flow, applications	
10/5	Midterm	
10/10	Network flow, applications	ProjecL mi
