CMPT 405 - D100 Design and Analysis of Computing Algorithms

Instructor(s): Ramesh Krishnamurti

Calendar Objective/Description:
Models of computation, methods of algorithm design; complexity of algorithms; algorithms on graphs, NP-completeness, approximation algorithms, selected topics.

Instructor's Objectives:
- Network Flow
- Greedy Algorithms
- Dynamic Programming
- NP-Completeness
- Approximation Algorithms
- Linear Programming
- Local Search
- Randomized Algorithms (time permitting)

Prerequisites:
CMPT 307.

Grading:
To be announced during the first week of classes.

Required Books:
Algorithm Design, J. Kleinberg, E. Tardos, Addison-Wesley, 2006, 9780321295354

Reference Books:

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).