CMPT 705 - G100 Design and Analysis of Algorithms

Instructor(s): Ramesh Krishnamurti

Calendar Objective/Description:
The objective of this course is to expose students to basic techniques in algorithm design and analysis. Topics will include greedy algorithms, dynamic programming, advanced data structures, network flows, randomized algorithms.

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

Prerequisites:
None

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).