COMPUTING SCIENCE 204 (B1)
Algorithms I
Summer 2000

Instructor: I. E. Leonard
Office: CAB 624, **Phone**: 492-0812, **Office Hours**: Monday – Thursday 10:30 – 11:30
e-mail: `isaac@cs.ualberta.ca` or `eleonard@vega.math.ualberta.ca`
web: `http://www.cs.ualberta.ca/~isaac` (handouts, solutions, etc. available here)

Teaching Assistants:
Weinan Wang
`weinan@cs.ualberta.ca`

Lecture B1: Monday – Friday 9:00 – 10:10, **Room**: CAB 265

Labs:
J1 Monday – Thursday 10:30 – 12:00, CAB 265
The TA will be available for consulting during each lab section starting on Tuesday, July 11.

Prerequisites: CMPUT 115, CMPUT 272, MATH 113, 114, or 117

Textbooks
Required: *Computer Algorithms, Introduction to Design and Analysis, 3rd Edition*, by Baase and Van Gelder, Addison-Wesley, 2000
Recommended: *Problems on Algorithms*, by Ian Parberry, Prentice Hall, 1995

References: The following books are on reserve in Cameron Library:

Data Structures and Algorithms
by V.A. Aho, J.E. Hopcroft and J.D. Ullman
Foundations of Computing
by V.A. Aho and J.D. Ullman
Computer Algorithms, An Intoduction to Design and Analysis
by S. Baase
Fundamentals of Algorithmics
by G. Brassard and P. Bratley
Introduction to Algorithms
by T. Cormen, C. Leiserson and R. Rivest
Algorithmics – The Spirit of Computing
by D. Harel
Introduction to Algorithms – A Creative Approach
by U. Manber
Problems on Algorithms
by I. Parberry
Algorithms
by R. Sedgewick

Lecture material which is not included in the text may be taken from one or more of these references.

Calendar Description:

> **CMPUT 204 Algorithms I**
> The first of two courses on algorithm design and analysis, with emphasis on fundamentals of searching, sorting and graph algorithms. Examples include divide and conquer, dynamic programming, greedy methods, backtracking, and local search methods, together with analysis techniques to estimate program efficiency. will be developed to aid in judging program efficiency. Prerequisites: CMPUT 115, CMPUT 272; MATH 113, 114, or 117.

Assignments: There will be 4 assignments, the assignments are due at the beginning of class on the due date (specified on the handouts). Late assignments will not be accepted unless you have a reasonable excuse such as illness.

Collaboration on the assignments *is* allowed, that is, you may (and are encouraged to) discuss the assignment solutions with other students, but the final version of the assignment which is handed in should be your own. Blatant copying of assignments will be considered cheating and this is a serious offence which will be penalized, for example, the *minimum* penalty is a mark of 0. See the standard handout on academic dishonesty policy.

Course Grade: The course grade will be determined by the percentages indicated below, and the grade you receive in the course will be relative to the class performance. The midterm examination will be held in class on Friday, July 28. The final exam will be held on Thursday, August 17 from 11:30 until 1:30. Both examinations are closed book. Re-examinations may be allowed if you fail the course, but certain conditions must be met.

Assignments	28%
Midterm Examination	27%
Final Examination	45%