GRANDE PRAIRIE REGIONAL COLLEGE
Department of Computer Systems Technology
Course Outline

F.92

CT 2270 - OPERATING SYSTEMS (3-1)

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| INSTRUCTOR: | David Gregg |
| OFFICE: | E316 |
| PHONE: | 539-2976 |
| MATERIALS REQUIRED: | Text: Modern Operating Systems, Andrew S. Tanenbaum. |
| PREREQUISITE: | CT 1420 |
| COREQUISITE: | CT 2140 |
| COURSE OBJECTIVES: | You will be introduced to concepts and features commonly found in operating systems. Class discussion will concentrate on traditional operating system topics (processes, memory management, file systems, input/output) as well as distributed operating system topics (communication, synchronization, and distributed file systems). MS-DOS, UNIX, and NOVELL NETWARE will be studied as examples of traditional and distributed operating systems.<br><br>A course in operating systems is usually taught at a conceptual level, and as operating systems are very complex software systems it is usually impractical to expect much "hands-on" experience. However this course will be as practical as possible with several assignments using IBM AT machines and the MS DOS operating system, with a basic exposure to the NOVELL network operating system.<br><br>All programming assignments will be done in the C language and or Intel 80X86 assembler. |

| Topic | Classes Required | Chapters |
|---|---|---|
| Concepts | 3 | 1 |
| Processes | 3 | 2 |
| Memory Management | 5 | 3 |
| File Systems | 5 | 4 |
| Input/Output | 3 | 5 |
| Deadlock | 2 | 6 |
| Computer Communications | 3 | |
| Distributed Computer Systems | 3 | 9 |
| Communication in a Distributed System | 3 | 10 |
| Synchronization in a Distributed System | 1 | 11 |
| Processes and Processors in a Distributed System | 1 | 12 |
| Distributed File Systems | 2 | 13 |

**EVALUATION:**

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| Assignments and Quizzes: | 35% |
| Mid-term Exam: | 25% |
| Final Exam: | 40% |

**FINAL GRADE:** Final percentages are converted to GPRC's nine point scale as follows:

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|---|---|---|
| 90 - 100% | 9 | |
| 80 - 89% | 8 | Excellent |
| 72 - 79% | 7 | |
| 65 - 71% | 6 | Good |
| 57 - 54% | 5 | |
| 50 - 56% | 4 | Pass |
| 45 - 49% | 3 | Fail |
| 26 - 44% | 2 | |
| 0 - 25% | 1 | |

**COURSE CONTENT:** This course is 3 lecture hours and 1 lab hour per week. Lectures are held in classrooms, and labs are held in a computer lab equipped with a minimum of IBM AT class machines, Pascal and C compilers, an Intel 80X86 assembler, and a network running the NOVELL operating system.

**ASSIGNMENT POLICY:** All assignments must be turned in - late or not - in order for you to receive a passing grade in this course. Late assignments will be accepted but penalized by 25%. Assignments will not be worth any marks unless a 50% average is maintained on all exams and quizzes.