

**California State University Channel Islands
New Course Proposal**

Program Area: Computer Science

1. Catalog Description of the Course.

IT 362 OPERATING SYSTEMS FOR IT (3)

Three hours of lecture per week

Prerequisites: IT 262

Examination of the principal types of operating systems including batch, multi-programming, and time-sharing. Networked systems are also discussed. The salient problems associated with implementing systems are considered including interrupt or event driven systems, multi-tasking, storage and data base management, and input-output. Role and tasks of system administrator. System management tools. Case analysis of systems such as DOS/Windows, Linux/Unix, VMS. Projects will be implemented to reinforce the lectures.

2. Mode of Instruction.

	<u>Units</u>	<u>Hours per Unit</u>	<u>Benchmark</u>	<u>Enrollment</u>
Lecture	3	1		24
Seminar	0	0		0
Laboratory	0	0		0
Activity	0	0		0

3. Justification and Learning Objectives.

Justification: BSIT required course.

Learning Objectives:

Students who successfully complete this course will be able to:

1. Organize and express ideas clearly and convincingly in oral and written forms
2. Explain the fundamental role of an operating system.
3. Explain the role of system administrator
4. Be able to identify issues in concurrent programming
5. Be able to identify the strengths and weaknesses of an operating system

4. Is this a General Education Course?

No.

5. Course Content in Outline Form.

Topics:

1. Processes and threads
2. Memory management
3. Multiprogramming and resource allocation
4. Inter-process communication
5. System Administration
6. Case Studies: Operating Systems

6. Cross-listed Courses.

None.

7. References.

<u>Title</u>	<u>Author</u>	<u>Publisher</u>	<u>Year</u>	<u>ISBN</u>
1. Applied Operating System Concepts	Siberschatz, Galvin and Gagne	Wiley	2000	0471365084
2. Security in Computing (2nd ed)	Pfleeger	Prentice-Hall	1996	0133374866
3. Operating Systems: Internals and Design Principles	William Stallings	Prentice Hall	2000	0130319996

8. Faculty Qualified to Teach This Course.

Qualified Faculty: Smith, Wolfe

9. Frequency.

Projected semesters to be offered: Fall, Spring

10. New Resources Required.

- a. New Equipment needs: Use of existing computer lab.
- b. New Library needs: none
- c. New Space/Facilities needs: none

11. Program Modifications.

None.

12. Proposer of Course.

Proposer: Smith, Wolfe Date: 7/13/2004