Course Syllabus

1. **Name of Curriculum**   Bachelor of Science (Computer Science)

     Mahidol University International College

2. **Course Code**   ICCS315   **Course Title**   Operating Systems

3. **Number of Credits** 4   **(Lecture/Lab)** (4-0)

4. **Prerequisites**

   ICCS 203

5. **Type of Course**

   Required for 3rd year Computer Science students

6. **Trimester/ Academic Year**

   First trimester / 2004-2005

7. **Course Description**

   This course is focused on functions and components of operating systems. Students are going to study for contemporary multiprocessing / multiprogramming systems. Exploration of systems programs: their design, internal structure and implementation are also included. Advanced topics in operating systems, performance measurement and evaluation and design of operating system modules will be taught.

8. **Course Objectives**

   1. To be able to describe the components of contemporary operating systems
   2. To be able to criticize the design of the operating system structures
   3. To be able to explain different issues in modern operating systems
   4. To be able to measure the performance of operating systems in different environment
   5. To be able to select the optimal algorithms in different operating systems parts
   6. To be able to criticize different operating systems in different platform

9. Course Outline

week	Lecture Topic	Hour
1-2	Introduction, Computer system-structures:- I/O Storage structure	6
3	Operating System Structures	4
4	Processes Concept	4
5	CPU Scheduling	4
6	Process Synchronization	4
7	Deadlock concept	4
8	Memory Management	4
9	Virtual Memory	4
10	I/O system concepts and its structures	4
11	Protection & Security	4
11	**Total**	44

10. Teaching Methods
Lecturing, demonstration and presentation

11. Teaching Media
Slides, handouts

12. Course Achievement
Assessment made from the set-forward criteria according to the MUIC's grading policy.

13. Course Evaluation

Class attendance	5 %
Mid-Term Exam	30 %
Final Exam	40 %
Term Project	15 %
Assignments	15 %

14. References
 1.   A.Silberschatz, et. al., Operating System concepts, Sixth edition , Addison
      Wesley, 2001
 2.   A.Silberschatz, et. al., Applied Operating System concepts, First edition ,
      Addison Wesley, 2000

15. Instructor *(s)*
      Poramin Bheganan

16. Course Coordinator
      Poramin Bheganan