

**SAVITRIBAI PHULE PUNE UNIVERSITY**  
**T.Y. B. Sc. COMPUTER SCIENCE SYLLABUS**  
**TO BE IMPLEMENTED FROM ACADEMIC YEAR 2015-16**  
**TITLE OF PAPER : System Programming & Operating System**  
**Code No. : CS-347**

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**Aim:**

To understand the process of designing and implementing System programs and operating system components.

**Objective :-**

1. Design and implement System programs with minimal features to understand their complexity.
2. Design and implement simulations of operating system level procedures.

**Syllabus**

Sr. No	Topic	Lectures
1	Line Editor	8 lectures
2	SMAC0 simulator	8 lectures
3	Assembler	12 Lectures
4	Macro processor	12 lectures
5	DFA driver	8 lectures
6	Development Utilities	8 lectures
7	Toy shell	8 Lectures
8	CPU Scheduler	12 lectures
9	Deadlock detection	8 lectures
10	Page Replacement Algorithms	12 lectures
11	File Allocation methods	12 Lectures

**Examination**

Internal Marks : Activity + Labbook(10+10)

External Marks : two programs(35each) oral(5) Activity(5)