Course Title and Code	IT 361 System Administration and Maintenance

I. Course Identification and General Information:

Course Title	System Administration and Maintenance	Course Code	IT 361	Pre-requisite	IT 251
Department	Information Technology	Course Level	7	Credit Hours	3(2+1)

II. Course Description/Topics: The following course topics will be covered.

This course covers the deployment and maintenance of modern computer systems, with particular emphasis on the administration of user accounts. The course includes an overview of basic administrative tasks and maintenance associated with network operating systems such as Windows and Unix/Linux (Ubuntu).

III. Course Outcomes: Summary of the main learning outcomes for students enrolled in the course.

- Learn main concepts of system administration relevant to software systems, and hardware.
- Work effectively in teams to accomplish a common management and maintenance tasks.
- Acquire important skills in H/W & S/W management and maintenance.
- Explore additional functionality for operating systems and networking, manage S/W & H/W problems and failures.
- Upgrade and configure hardware devices and software components.
- An ability to identify and analyze user problems relevant to administration and maintenance tasks.
- Explain key security concerns from a Systems administration perspective.
- Explain the concept of database, network security, backup and recovery.
- Discuss procedures and practices that maybe applied to systems integration and architectures to ensure secure system operations and information assurance.
- Describe the importance of application maintenance for an organization and identify when an application meets the needs of an organization.

IV. Required Text:

- Effective Maintenance Management, V. Narayan, 2nd Edition, (2011), ISBN-13: 978-0831134440.

V. References:

- UNIX and Linux System Administration Handbook, Evi Nemeth, Garth Snyder, Trent R. Hein, Ben Whaley, 4th Edition, 2011.
- Computerized Maintenance Management Systems Made Easy: How to Evaluate, Select, and Manage CMMS, Kishan Bagadia, McGraw-Hill Professional, 2006, ISBN-13: 978-0071469852.
- Proactive Security Administration,George E. Curtis R. Bruce McBride, second Edition , (2010).
- Network Security, Administration and Management: Advancing Technology and Practice, Dulal Chandra Kar , Mahbubur Rahman Syed, 1st Edition, (2011), ISBN-13: 978-1609607777.