Credit hours: 4

Contact/Instructional hours: 40 (40 Theory Hours)

Prerequisite(s) and/or Corequisite(s):
Prerequisites: GE127 College Mathematics I or equivalent, TB143 Introduction to Personal Computers or TB145 Introduction to Computing

Course Description:
Students will be introduced to network-related areas of project management, vendor management, network inventory management, security management, etc., that are related to the day-to-day job of network administration.
I. MAJOR INSTRUCTIONAL AREAS

Network Components, Configuration, and Strategy
Services: E-mail and Print
Managing the Network and System Environment
Management, Monitoring, and Maintenance
Updating Services and Equipment
Helpdesk and Troubleshooting
Relating to the Customer

COURSE OBJECTIVES

Describe network client platforms.

Examine advantages and disadvantages of manual platform configuration and automating setup.

Contrast advantages of different network topologies.

Categorize different types of network hardware.

Compare arguments for and against centralization of network services.

Describe a process for building services.

Defend reasons for open architecture as opposed to proprietary architectures.

Explain the network concepts of capacity planning, redundancy, bandwidth, and latency.

Describe potential policies for setting up and administering E-mail use.

Compare technologies for delivering Remote Access Service.

Identify the components of a robust security policy.

Explain the procedures that should be enacted upon employee separation from corporation.

Describe the differences between risk, mitigation, and control.

Identify critical business unit components and fit them into a disaster recovery strategy.

Plan for backup and recovery needs.

Explain the differences between Return on Investment and Total Cost of Ownership.
Create reasonable transition plan from old to new service applications.

List the steps in a testing process.

Describe appropriate components of a communication plan.

Describe appropriate attendees, purpose, and expected outcomes of a post-implementation review.

Describe the difference between historical data and real-time monitoring.

Identify some types of monitoring tools.

Justify allotment of time for proper debugging of network problems.

Plan for and properly staff a Help Desk for customer use.

Create an escalation policy.

Identify the important features of a Problem Ticket Tracking system.

List and describe the important parts of a proper change management process.

**TEACHING STRATEGIES**

Curriculum is designed to promote a variety of teaching strategies that support the outcomes described in the course objectives and that foster higher cognitive skills. Delivery makes use of various media and delivery tools in the classrooms.

**TEXT**


**EVALUATION**

A. **COURSE REQUIREMENTS**

1. **Attendance and Participation**

   Regular attendance and participation are essential for satisfactory progress in this course.

2. **Completed Assignments**
Each student is responsible for completing all assignments on time.

3. Team Participation

Each student is responsible for participating in team assignments and for completing the delegated task. Each team member must honestly evaluate the contributions by all members of their respective teams.

B. WEIGHTED VALUES

The final grade will be based on the following weighted values:

<table>
<thead>
<tr>
<th>Grade Categories</th>
<th>Percentage of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>40%</td>
</tr>
<tr>
<td>Discussion</td>
<td>10%</td>
</tr>
<tr>
<td>Project</td>
<td>40%</td>
</tr>
<tr>
<td>Quiz</td>
<td>5%</td>
</tr>
<tr>
<td>Final</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Final grades will be calculated from the percentages earned in class as follows:

- **A** 90 - 100%         4.0
- **B+** 85 - 89%         3.5
- **B** 80 - 84%         3.0
- **C+** 75 - 79%         2.5
- **C** 70 - 74%         2.0
- **D+** 65 - 69%         1.5
- **D** 60 - 64%         1.0
- **F** <59%            0.0

*Class/Group Participation: Includes class and group participation and cooperation as well as participation in discussion items. This grade will reflect student attendance. Required activities are detailed in this syllabus. The instructor will give additional individual and group assignments to promote and evaluate objectives.

REFERENCES

A. ITT TECH VIRTUAL LIBRARY

Login to the ITT Tech Virtual Library to access online books, journals, and other reference resources selected to support ITT Tech curricula.
http://library.itt-tech.edu/

B. OTHER


Fleury, Marc and Scott Stark. JBoss Administration and Development. SAMS, 2002.


ELECTRONIC RESOURCES

ITT Technical Institute Virtual Library
http://library.itt-tech.edu/