IT Department Simulation: Build Your Secure Infrastructure

Objective

Students will take on roles within a simulated IT department to design and explain IT operations workflows, administrative responsibilities, and the importance of security policies in protecting an organization's digital assets.

Instructions:

1. Divide Students into Teams of 4–6. Research and define the following roles:
- IT Operations Engineer
- System Administrator
- Security Analyst
- Policy Manager
- Compliance Officer
- Help Desk Technician

2. Distribute the Scenario:

Your university is launching a new online learning platform. Your IT team must build, operate, and secure this platform. Each team member must contribute based on their role to:
- Set up operations processes (e.g., monitoring, backup, patching)
- Define system administration tasks (e.g., account creation, access controls)
- Identify needed security policies (e.g., password policies, remote access rules)
- Explain how these policies protect users, systems, and data

3. Planning Phase (20–30 minutes):

Teams will:
- Outline each role's responsibilities
- Create a sample IT operations checklist (e.g., backup schedule, system monitoring)
- Write two critical security policies (e.g., Acceptable Use Policy, Data Retention Policy)
- Explain how their policies reduce risk and support daily operations

4. Presentation Phase (10–15 minutes):

Teams present:
- A brief explanation of their infrastructure setup
- How operations and admin duties are divided
- Their written policies and justifications

Student Worksheet Template:

Team Name:	
Scenario Summary:	
IT Operations Tasks:	
Administration Duties:	
Security Policies:	
Policy Purpose:	
Team Roles & Contributions:	
Lessons Learned:	