

MURRAY STATE UNIVERSITY
DEPARTMENT OF INDUSTRIAL AND ENGINEERING TECHNOLOGY

Course Number: TSM 233

Credit Hours: 3

- I. TITLE: Network Services
- II. CATALOG DESCRIPTION:
A lecture-lab class providing the student in-depth analysis and evaluation, name resolution, directory services, IP management, email and web services and service availability. Two hours of lecture and two hours of lab per week.
Prerequisite: 133 and 232
- III. PURPOSE:
The purpose of the course is to introduce the student to the applications, hardware and protocols that constitute network services.
- IV. COURSE OBJECTIVES:
 - A. Provide the student with the fundamentals of network services.
 - B. Provide the student with the working knowledge of IP management.
 - C. Provide the student with the fundamentals and operation of different types of network name resolution.
 - D. Provide the student with the working knowledge of directory services characteristics and the working knowledge to install and configure multiple directory services.
 - E. Provide the student with the working knowledge of web services and the protocols used to implement secure web transmission.
 - F. Provide the student with the fundamentals and working knowledge of email services.
 - G. Provide the student with the working knowledge of server virtualization and clustering.
 - H. Provide the student with ethical guidelines when managing organizational and user data.
- V. CONTENT OUTLINE:
 - A. Defining network services
 - B. IP Management
 - 1. Dynamic host control protocol (DHCP)
 - C. Name resolution
 - 1. Domain name services (DNS)
 - D. Directory services
 - 1. Defining directory services
 - 2. Microsoft Active Directory
 - 3. Lightweight Directory Access Protocol (LDAP)
 - E. Web Services
 - 1. Hyper text transfer protocol (HTTP)
 - 2. File transfer protocol (FTP)
 - 3. Secure socket layer (SSL)
 - F. Email Services
 - 1. Server - simple mail transfer protocol (SMTP)
 - 2. Client - POP & IMAP
 - 3. Proprietary and open source email systems
 - G. Service availability
 - 1. Server clustering
 - 2. Server virtualization
 - H. Ethics

VI. INSTRUCTIONAL ACTIVITIES:
Lecture, demonstration and laboratory.

VII. FIELD, CLINICAL, AND/OR LABORATORY EXPERIENCES: (If not applicable, write NONE.)
Laboratory exercises are used to enhance and reinforce the lecture material. VIII.

VIII. RESOURCES:
Lab equipment and its documentation as well as numerous internet resources.

IX. GRADING PROCEDURES:
Network Project Grade, participation, and attendance will determine the grade for the course using the weighted scale. The grading scale is: 90-100 (A), 80-89 (B), 70-79 (C), 60-69 (D) and below 60 (E). Grading rubric for project assignment included in a separate handout.

X. ATTENDANCE POLICY:

This course will adhere to the "Attendance Policy" published in the MSU Undergraduate Bulletin.

Lecture Attendance: Lecture Attendance will taken. Students missing more than 5 lecture meetings (unexcused or excused) will receive a failing grade for the course. Students with three or more unexcused lecture absences will have their final grade lowered by one letter grade.

Attendance for lab is mandatory. No provisions will be made for making up absences from labs. Students must attend lab in order to get credit for that particular lab. An unexcused absence will result in a grade of zero for that particular lab. More than 15 minutes late will constitute ½ an absence. Also, leaving more than 15 minutes early will constitute ½ an absence. **No credit will be given for any lab not attended**, and only partial credit will be given for any lab for which a student is late or leaves early.

Excused Absences - It is your responsibility to provide documentation.

- a. Illness – a signed doctor's excuse on the doctor's letterhead or prescription form or an excuse from student health services will be required. A scheduled office appointment will not be accepted as an excused absence since it is under your control to set the appointment at another time.
- b. University sanctioned trips including field trips for other classes – a signed note from the sponsor of the trip will be required. Social fraternity or sorority trips are not excused.
- c. Family emergencies – will be handled on a case-by-case basis. I will require some form of documentation.

XI. ACADEMIC HONESTY POLICY:

This course will adhere to the "Academic Honesty Policy" published in the MSU Undergraduate Bulletin.

Cheating, plagiarism, submitting another person's material as one's own, or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, or term papers, laboratory reports, drawings or the presentation of unacknowledged material as if it were the student's own work. Disciplinary action may result in no credit for an assignment or exam and/or failure of the course.

XII. TEXT AND REFERENCES:

No required reading material.

XIII. PREREQUISITES:

TSM 133 and TSM 232

XIV. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270- 809-3361 (TDD).