



Course Information

Course Title	Information Storage and Management
Course Prefix, Num. and Title	ITNW 1335 - Information Storage and Management
Division	Technology and Business
Department	Computer Science
Course Type	WECM Course
Course Catalog Description	An introduction to data storage-related technologies. Topics include data storage for cloud, Big Data, mobile, social media, and software-defined data centers. Provides a strong understanding of storage technologies and prepares students for advanced concepts, technologies, and processes.
Pre-Requisites	ITNW 1325 or ITCC 1414
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	3:2:2
Lab/Other Hours	
Equated Pay Hours	2
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

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Information growth and challenges
Define a storage system and its environment
Review the evolution of storage technologies
Introduce intelligent storage systems
SCSI and Fibre Channel architecture
Direct-attached storage (DAS)
Storage area networks (SANs)
Network-attached storage (NAS)
Internet Protocol SAN (IP-SAN)
Content-addressed storage (CAS)
Storage virtualization
Introduce business continuity
Backup and Recovery
Local Data Replication
Remote Date Replication
Storage security
Storage infrastructure monitoring and management

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

1. Differentiate storage architectures and key data center elements
2. Explain the components of storage infrastructure including subsystems, RAID and intelligent storage systems
3. Demonstrate network technologies used in storage systems
4. Outline the benefits and components of Storage Area Networks (SANs)
5. Adapt contingency plans for backup, replication and archiving
6. Evaluate information security requirements and recommend solutions
7. List SAN management issues and requirements

Methods of Assessment:

All outcomes will be assessed by one or more of the following:

Individual/Group Assignments
Individual/Group Projects
Reading Assignments
Presentations
Lab Works/Assignments
Quizzes/Tests/Exams

Required text(s), optional text(s) and/or materials to be supplied by the student:

- Information Storage and Management: Storing, Managing, and Protecting Digital Information; Author: EMC Cooperation; Publisher: Wiley; ISBN: 9780470618332 or similar title

Suggested Course Maximum:

18

List any specific or physical requirements beyond a typical classroom required to teach the course.

- Current VMware Workstation for each student and instructor
- Antivirus software for each student and instructor
- Computer (64 bit CPU, 12 GB Ram, graphics cards, monitors, for each student
- Removable hard drive for each student and instructor (1 TB hard drive)
- Laser Printer
- Cat 5 network cable, RJ-45 jacks and crimper for each student and 2 cable tester
- Instructor needs 2 monitors, 2 NICs, & Data projector

Current lab equipment has the capability for 18 students

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Labs: 20-40%

Homework: 20-40%

Tests & Final Exam: 40-60%

Attendance & Participation: 0-20%

Grading System:

100 - 90 = A

89 - 80 = B

79 - 70 = C

69 - 60 = D

and below = F

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist