

I. Catalog Description



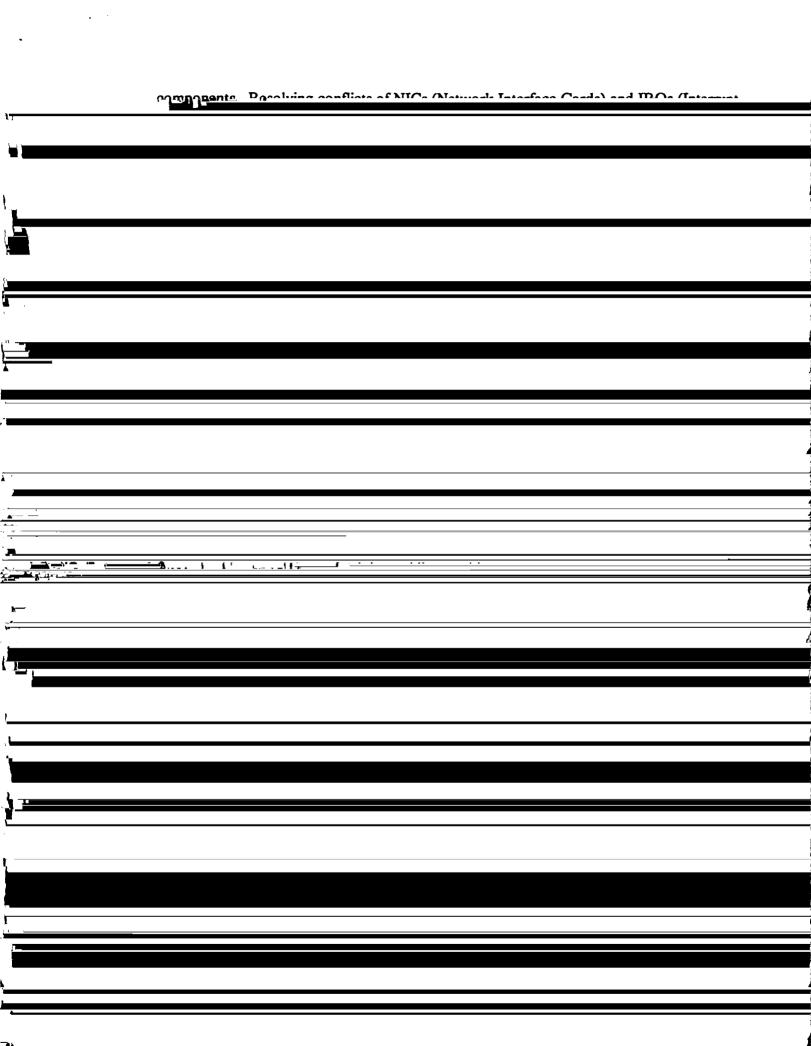
Prerequisites: CO 352 or IM 352 or equivalent

This course explores local area network (LAN) topologies and their associated protocols. The course introduces ways of interconnecting, securing, and maintaining LANs. It provides students with hands-on experience in the interconnection of multiple LANs. It also presents a hands-on approach to design, testing and administration of interconnected LANs.

II. Course Objectives

Upon successful completion of this course, the student will be able to:

- A. Match various LAN topologies with their associated protocols.
- B. Interconnect senarate I ANs
- C. Distinguish between the different LAN interconnection devices and their operation.
- D. Distinguish between various IEEE (institute of Electrical and Electronic Engineers) 802 Standard LAN packets.
- T. Disager as managed ANI architecture and devolutions for them



toward the 40%. Examinations consist of short-answer, analysis, and what-if questions.

		And Project Selected projects covering I AN meisters and teau block-estima
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		interconnection, etc.
		Grading Scale: The standard grading scale will be used.
		90%+=A; 80-89%=B; 70-79%=C; 60-69%=D; below 60%=F.
	V.	Required Textbook(s), Supplementary Books and Readings
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Fitzgerald, J., Business Data Communications: Basic concepts, Security, and Design, (Fourth Edition), John Wiley and Sons, Inc., New York, NY 1993.

Harbaugh, L.G., Novell's Problem-Solving Guide for NetWare Systems, SYBEX, Inc. Alameda, CA 1993.

Held, G., Data Communications Networking Devices, (Second Edition), John Wiley and Sons, New York, NY 1989.

Lawrence, B., *Using Novell NetWare*, (Second Edition), Que Corporation, Indianapolis, IN 1992.

Madden, J., and Stuple, S. J., (Editors), *Networking Essentials*, (Second Edition), Microsoft Press, Redmond, WA 1998.

Moshos, G.J., Data Communications: Principles and Problems, West Publishing Co., St.

Paul, MN 1989.

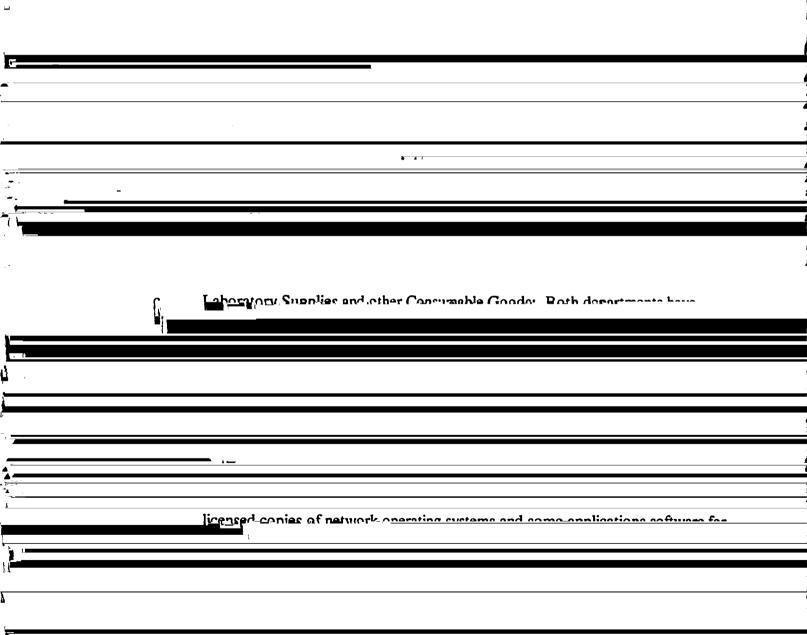
Ramos, E., Schroeder, A., and Simpson, L., Data Communications and Networking Fundamentals Using Novell NetWare, Macmillan Publishing Company, New York, NY

Course Analysis

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) pr	u-	LANs have grown to become quite popular and many of our majors have obtained jobs as
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	-	as LAN managers. The departments, at the moment, do not have courses which explicitly
		teach the ideas of I ANs as proposed in this course. Both departments! Companie
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Section	n C: Implementation
C1	Familian

- C1 Faculty resources are currently adequate.
- C2 Resources needed for this course are available although they can be improved.
 - a. Space: Classroom space is adequate. The Eberly networking laboratory is adequately equipped for this course.
 - h. ____Faniament: The Fherly networking laboratory is adequately equipped for this





Indiana. Pennerdusai ... son Date: December 16, 1998 Suhiant Latter of Runanes for Committee Dr. William Oblitey, Chair, Computer Science Department To: Mr. James Wolfe, Computer Science Department Kenneth L. Shildt, Chair, MIS and Decision Sciences Department From:

The MIS and Decision Sciences Department supports the course proposals for CO/IM 352 Local Area Networks Design and Installation as it is being proposed as a course for Computer Science, Office Systems, and MIS majore. This course

	Subject: Computer Science Curriculum Support Date: Wed. 16 Dec 1998 15:34:43 -0500	·
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	TO:	William Oblitey, Chair Computer Science Department
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		Management Information Systems Department
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	FROM:	Wayne Moore, Chair Office Systems and Business Education Department
	DATE:	December 16, 1998
	SUBJECT:	CO/IM 354 NEW COURSE PROPOSAL
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The content of the course is relevant to all technology majors at IUP. Students in our program will benefit by this course.

proposal.

proposal for CO/IM 354—Testing and Controlling LAN's. The department supports this course

The cooperative effort that led to the development of this course strengthens the university's technology programs.