

## INTRODUCTION TO SYSTEM ADMINISTRATION

**3 Credits**  
**IT 150-6**  
**Spring 2022**

**Instructor:** Duwayne Thomas

**Office Hours:** Monday to Friday, 8:00am to 5:00pm

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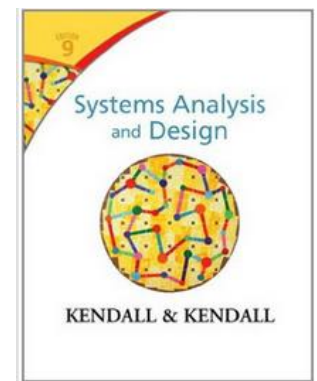
**Office Phone:** (928) 674-5764

**Class Location:** Computer Lab

**Class Meeting Times:** Wednesdays, 1:00pm to 3:40pm

### Required Materials:

**Textbook:** *System Analysis and Design, Kendall and Kendall*  
ISBN: 978-0133023442



**Tools:** Wifi, Laptop, notebook, pens, pencils, usb drive, printing paper

### Mission Statement

Navajo Technical University's mission is to provide University readiness programs, certificates, associate, baccalaureate, and graduate degrees. Students, faculty, and staff will provide value to the Diné community through research, community engagement, service learning, and activities designed to foster cultural and environmental preservation and sustainable economic development. The University is committed to a high quality, student-oriented, hands-on-learning environment based on the Diné cultural principles: *Nitsáhákees, Nahátá, Íina, Siihasin.*

### Course Description

This course exposes students to the best practices of system and network administration, independent of specific platforms or technologies. Students will learn six key principles of site design and support practices: simplicity, clarity, generality, automation, the mutation, and basics. This course examines the major areas of responsibility for system administrators within the context of these principles. Students will also be introduced to change management and revision control, server-upgrades, maintenance windows, and service conversions.

Week	Week of	Chapters	Assignment (True/False, Multiple Choice, and Matching)	Quiz
1	1/19/22	Introduction and Syllabus	1. Pre-Assessment Test	
2	1/26/22	Chapter 1: Assuming the Role of The Systems Analyst	2. Chapter 1 Review Questions 3. Figures 1.1, 1.3, 2.5, 2.8, 2.12, 2.15	
3	2/02/22	Chapter 2, Understanding Organizational Style and Its Impact On Information Systems	1. Chapter 2 Review Questions 2. Figures 1.1, 1.3, 2.5, 2.8, 2.12, 2.15	Chapter 1
4	2/09/22	<b>Chapter 3</b> , Project Management	1. Chapter 3 Review Questions 2. Figures 3.4, 3.22, 3.23	Chapter 2
5	2/16/22	<b>Chapter 4</b> , Information Gathering: Interactive Methods	1. Chapter 4 Review Questions 2. Figures 4.7, 4.8, 4.9	Chapter 3
6	2/23/22	<b>Chapter 5</b> Information Gathering: Unobtrusive Methods	1. Chapter 5 Review Questions 2. <b>STR</b> uctured <b>OB</b> servati <b>ON</b> of the <b>E</b> nvironment ( <b>STROBE</b> )	Chapter 4
7	3/02/22	<b>Chapter 6</b> Agile Modeling and Prototyping	1. Chapter 6 Review Questions 2. Figure 6.7, 6.9, 6.11	Chapter 5
8	3/09/22	MID-TERM EXAM	Chapters 1 to 6	Mid-Terms
9	3/16/22	<b>Chapter 7</b> Using Data Flow Diagrams	1. Chapter 7 Review Questions 2. Figure 7.1, 7.3, 7.6, 7.9, and 7.17	Chapter 7
10	3/23/22	<b>Chapter 8</b> , Analyzing Systems Using Data Dictionaries	1. Ch. 8 homework & Extra Credit 2. Figure 8.11, 8.13, 8.14	Chapter 8
11	3/30/22	<b>Chapter 9</b> , Process Specifications and Structured Decisions	1. Ch. 9 homework & Extra Credit 2. Figure 9.14,	Chapter 9
12	4/06/22	<b>Chapter 10</b> , Designing Effective Output	1. Ch. 10 homework 2. Figure 10.2, 10.6, 10.13, 10.17, 10.18, 10.19, & 10.22	Chapter 10
13	4/13/22	<b>Chapter 11</b> , Designing Effective Output	All Time Webpages	Chapter 11
14	4/20/22	<b>Chapter 12</b> , Designing Effective Input	Form Designing	Chapter 11
15	4/27/22	<b>Chapter 13</b>		Chapter 12
16	5/04/22	POST-ASSESSMENT	Study for Final Exam	

17	5/11/22	FINAL EXAM	Finals	Chapters 1—12
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COURSE OUTCOMES	COURSE MEASUREMENTS
1. A strong understanding of Understand the principles and tools of systems analysis and design	Complete reading assignments, homework assignments, exams, projects, and quizzes.
2. A strong ability to solve a wide range of problems related to the analysis, design and construction of information systems	
3. An ability to communicate and to be able to present projects	
4. A strong knowledge to plan and undertake a major individual project, prepare and deliver coherent and structured verbal and written technical reports	
5. know how to use MS Project as a CASE tool	

### Grading Plan

Homework	20%	A = 100 - 90%
Mid-term	20%	B = 89 - 80%
Final Exam	25%	C = 79 - 70%
Project	10%	D = 69 - 60%
Quizzes	20%	F < 60%
Class Participation	3%	
Portfolio:	2%	

### Grading Policy

Each student must do his or her own homework and case studies. Discussion among students on homework and cases is encouraged for clarification of assignments, technical details of using software, and structuring major steps of solutions - especially on the course's Web site. Students must do their own work on the homework and exam. Cheating and Plagiarism are strictly forbidden. Cheating includes but is not limited to: plagiarism, submission of work that is not the student's own, submission or use of falsified data, unauthorized access to exam or assignment, use of unauthorized material during an exam, supplying or communicating unauthorized information for an assignment or exam.

### Participation

Students are expected to attend and participate in all class activities- as listed above, as it is 25% of the grade. Points will be given to students who actively participate in class activities including field trips, laboratories, and ask questions of guest speakers and other presenters.

## Cell phone and head phone use

Please turn cell phones off or place them on silence or vibrate mode **BEFORE** coming to class. Also, answer cell phones **OUTSIDE OF CLASS** (not in the classroom). Exercising cell phone use courtesy is appreciated by both the instructor and classmates. Headphones are to be removed before coming to class.

## Attendance Policy

Students are expected to log into Moodle class page every week regularly, complete course work and take quizzes in a timely manner. This will serve as attendance. Absence from Moodle class page, regardless of the reason, does not relieve the student of his/her responsibility to complete all course work by the required deadlines. Incomplete or missing quizzes will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the Counseling Department for investigation and potential intervention. Instructors may drop students from the class after three (3) weeks of inactivity in Moodle class page unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.

**Outside Hours: For every 1 credit hour, students are expected to spend 2.5 to 3 hours for outside study time and course preparation.**

## Academic Integrity

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the University community. Avoid situations likely to compromise academic integrity such as: cheating, facilitating academic dishonesty, and plagiarism; modifying academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor.

## Diné Philosophy of Education

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes and so forth: Nitsáhákees, Nahát'á, Ína and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

## Students with Disabilities

The Navajo Technical University and Chinle NTU Learning Center are committed to serving all enrolled students in a non-discriminatory and accommodating manner. Any student who feels he/she may need an accommodation based on the impact of disability, or needs special accommodations should inform the instructor privately of such so that accommodations arrangement can be made. Students who need an accommodation should also contact the Special Needs Counselor at 505-786-4138.