Tel: (505) 387-7401



Course Title: Systems Requirements, Network, Analysis & Design Course #: MIS 525

Credit Hours: 3 Semester: Spring 2022 Cap:

Faculty: Dr. Frances C. Ijeoma E-mail: fijeoma@navajotech.edu

Office: Office Phone:

Office Hours (face-to-face or online): Online

Preferred Communication (email and/or text; will respond within 24 hours): Email

Modality (face-to-face, hybrid, or online): Online Class Location and Meeting Times (if face-to-face): Meeting Hours and Online Hours (if hybrid):

## **Required Materials:**

Textbooks: Systems Analysis and Design (12th edition) by Scott Tilley

ISBN-13: 978-0357117811 ISBN-10: 0357117816

## **Tools**:

**Laptop and Internet Access:** Every student is required to own a laptop and have internet access. **Lab Fee (if applicable):** 

#### Mission, Vision, and Philosophy

Mission: Navajo Technical University honors Diné culture and language, while educating for the future.

*Vision:* Navajo Technical University provides an excellent educational experience in a supportive, culturally diverse environment, enabling all community members to grow intellectually, culturally, and economically.

**Philosophy:** Through the teachings of Nitsáhákees (thinking), Nahátá (planning), Íína (implementing), and Siihasin (reflection), students acquire quality education in diverse fields, while preserving cultural values and gaining economic opportunities.

### **Course Description**

The primary objectives of this course are to introduce participants to concepts and techniques for analyzing problems and designing information systems that address those problems. Through team projects, students will develop an understanding of the systems development life cycle, the systems analyst's roles and responsibilities, and the interpersonal skills necessary to analyze business problems. Both managerial and technological aspects of systems design and implementation, including the process of planning and post implementation assessments. Emphasis is on a total systems solution rather than software alone. Students will study systems from the analysis through the implementation phase. Upon completion of the course,

students will understand how to identify and refine requirements, as well as how to complete process, data, and logic modeling within an object-oriented analysis framework.

Course Outcomes	Course Assessments
Explain systems analysis and design using an appealing full-	
color format, numerous screenshots and illustrations, and an	
easy-to-read style that invites students to learn.	
Introduce project management concepts early in the systems	
development process.	
Challenge students with a Question of Ethics mini-case in	
each chapter that asks them to respond to real-life ethical	
issues in an IT environment.	
Provide multi-method coverage, including a comparison of	
structured, object-oriented, and agile systems development	
methods.	
Explain how IT supports business requirements in today's	
intensely competitive environment, and	
Describe major IT developments and trends.	

# **Connections to Program Assessment (Course-Embedded Measures)**

## **Course Activities**

Week	Date	Class Topics/Reading Due	<b>Assignments Due</b>	Assessments
1	1/17- 1/23	Chapter 1: Introduction to	Discussion 1: due	
		Systems Analysis and Design	1/23	
			Questions	
			Exercises (pg. 42)	
			#1-10: <b>due 1/23</b>	
	1/21	Last day to add/drop		
2	1/24 - 1/30	Chapter 2 – Analyzing the	Discussion 2: <b>due</b>	
		Business Case	1/30	
			Mini Projects (pg.	
			72) #2-3: <b>due 1/30</b>	
3	1/31- 2/6	Chapter 3 – Managing Systems	Discussion 3: <b>due</b>	
		Projects	2/6	
			Questions	
			Exercises (pg.	
			100) #1-10: <b>due</b>	
			2/6	
4	2/7 -2/13	Chapter 4 – Requirements	Discussion 4: due	
		Engineering	2/13	

		T	T = == -	,
			Mini Projects (pg.	
			142) #1-2: <b>due</b>	
			2/13	
5	2/14 -2/20	Chapter 5 – Data and Process	Final Project	
	2/1T 2/2U	Modeling	Milestone One:	
		Wiodening		
			Introduction	
			Business	
			Requirements and	
			Competitors and	
			Technology due	
			2/20	
6	2/21 -2/27	Chapter 6 – Object Modeling	Discussion 5: due	
U	2/21 -2/21	Chapter 0 – Object Modelling		
			2/27	
			Mini Projects (pg.	
			199) #1-5: <b>due</b>	
			2/27	
	2/25	<b>Graduation Petition due</b>		
7	2/28 - 3/6	Chapter 7 – Development	Discussion 6: due	
		Strategies	3/6	
			Questions	
			Exercises (pg.	
			226) #1-10: <b>due</b>	
			*	
			4/10	
	3/7-3/11	Chapters 1-7	Midterm	
	OII OILL	Midterm grades due		
	3/14 - 3/18	Spring Break		
8			Final Project	
ð	3/20 - 3/27	Chapter 8 – User Interface Design	Final Project	
			Milestone Two	
			Technology	
			Solutions and	
			Recommendations	
			1	
9			due 3/27	i l
	3/28 – 4/3	Chapter 9 – Data Design	due 3/27 Discussion 7: due	
	3/28 – 4/3	Chapter 9 – Data Design	Discussion 7: due	
	3/28 – 4/3	Chapter 9 – Data Design		
	3/28 – 4/3	Chapter 9 – Data Design	Discussion 7: due 4/3	
	3/28 – 4/3	Chapter 9 – Data Design	Discussion 7: due 4/3 Mini Projects (pg.	
	3/28 – 4/3	Chapter 9 – Data Design	Discussion 7: due 4/3	
			Discussion 7: due 4/3 Mini Projects (pg.	
	3/28 – 4/3	Chapter 9 – Data Design  Last day to withdraw with "W"	Discussion 7: due 4/3 Mini Projects (pg.	
10			Discussion 7: due 4/3 Mini Projects (pg.	
10	3/31	Last day to withdraw with "W"	Discussion 7: <b>due 4/3</b> Mini Projects (pg. 313) #1-4: <b>due 4/3</b>	
10	3/31	Last day to withdraw with "W"	Discussion 7: due 4/3  Mini Projects (pg. 313) #1-4: due 4/3  Discussion 8: due	
10	3/31	Last day to withdraw with "W"	Discussion 7: due 4/3 Mini Projects (pg. 313) #1-4: due 4/3 Discussion 8: due 4/10	
10	3/31	Last day to withdraw with "W"	Discussion 7: due 4/3  Mini Projects (pg. 313) #1-4: due 4/3  Discussion 8: due 4/10  Questions	
10	3/31	Last day to withdraw with "W"	Discussion 7: due 4/3  Mini Projects (pg. 313) #1-4: due 4/3  Discussion 8: due 4/10  Questions Exercises (pg.	
10	3/31	Last day to withdraw with "W"	Discussion 7: due 4/3  Mini Projects (pg. 313) #1-4: due 4/3  Discussion 8: due 4/10  Questions	

11 4/1	1 – 4/17	Chapter 11 – Managing Systems Implementation	Discussion 9: <b>due 4/17</b> Mini Projects (pg. 398) #1-4: <b>due 4/17</b>
12 4/1	8 – 4/24	Chapter 12 – Managing Systems Support and Security	Discussion 10: due 4/24  Questions Exercises (pg. 452) #1-10: due 4/24
13 4/2	25 – 5/1	Project Presentation	Final Project Submission Business Systems Analysis due 5/1  Final Project Submission Business Systems Analysis Presentation due 5/1
14 5/9	9 – 5/12	Chapters 8-12	Finals
17 3/3	) — 31 <b>1</b> 2	Grades due to the Registrar	Finals
<del>                                     </del>	5/13	Graduation	

# **Grading Plan**

Discussion: 10% (10 Discussion Questions) Mini Projects Exercises: 10% (5 Mini Projects) Questions Exercises: 10% (5 Questions Exercises)

Project: 20% (Milestone One (5%), Milestone Two (5%), and Final Project and Presentation (10%))

Mid-term: 25% Final Exam: 25%

A = 100-90%B = 89-80%C = 79-70%D = 69-60%

F = 59% or less

## **Grading Policy**

Students must do their own work. Cheating and plagiarism are strictly forbidden. Cheating includes (but is not limited to) plagiarism, submission of work that is not one's own, submission or use of falsified data, unauthorized access to exams or assignments, use of unauthorized material during an exam, or supplying or communicating unauthorized information for assignments or exams.

## **Participation**

Students are expected to attend and participate in all class activities. Points will be given to students who actively participate in class activities including guest speakers, field trips, laboratories, and all other classroom events.

## Cell phone and headphone use

Please turn cell phones off **before** coming to class. Cell phone courtesy is essential to quality classroom learning. Headphones must be removed before coming to class.

## **Attendance Policy**

Students are expected to attend all class sessions. If more than ten minutes late, students will be counted as absent. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of responsibility to complete all course work by required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any inclass assignments or tests if permitted by the instructor. Incomplete or missing assignments 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) absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.

## **Study Time Outside of Class for Face-to-Face Courses**

For every credit hour in class, a student is expected to spend two hours outside of class studying course materials.

### **Study Time for Hybrid or Blended Courses**

For a hybrid or blended course of one credit hour, a student is expected to spend three hours per week studying course materials.

### **Study Time for Online Courses**

For an online course of one credit hour, a student is expected to spend four hours per week studying course materials.

## **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. The use of another person's ideas or work claimed as your own without acknowledging the original source is known as plagiarism and is prohibited.

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, Íína and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

At NTU's Zuni Campus, the A:shiwi Philosophy of Education offers essential elements for helping students develop Indigenous and Western understandings. Yam de bena: dap haydoshna: akkya hon detsemak a:wannikwa da: hon de:tsemak a:ts'umme. *Our language and ceremonies allow our people to maintain strength and knowledge*. A:shiwi core values of hon i:yyułashik'yanna:wa (respect), hon delank'oha:willa:wa (kindness and empathy), hon i:yyayumoła:wa (honesty and trustworthiness), and hon kohoł lewuna:wediyahnan, wan hon kela i:tsemanna (think critically) are central to attaining strength and knowledge. They help learners develop positive self-identity, respect, kindness, and critical thinking skills to achieve life goals successfully.

## **Students with Disabilities**

Navajo Technical University is committed to serving all students in a non-discriminatory and accommodating manner. Any student who feels that she or he may need special accommodations should contact the Accommodations Office (<a href="http://www.navajotech.edu/student-services#accomodations-services">http://www.navajotech.edu/student-services#accomodations-services</a>) in accordance with the university's Disability Accommodations Policy (see <a href="http://www.navajotech.edu/images/about/policiesDocs/Disability\_Exhibit-A\_6-26-2018.pdf">http://www.navajotech.edu/images/about/policiesDocs/Disability\_Exhibit-A\_6-26-2018.pdf</a>).

#### **Email Address**

Students are required to use NTU's email address for all communications with faculty and staff.

**Final Exam Date:**