



# SYSTEM ARCHITECTURE AND INTERGRATION

## SARC400 — System Architecture & Integration, 3.0 hours

### PROFESSOR

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Nicholas Theodule

Nicholas Theodule received his Master of Science Degree in Information Systems from University of Phoenix, after acquiring his Bachelor of Science in Electronics Communication Engineering Technology Degree. Prior to this, he had acquired an Applied Associates of Science Degree in Computer Aided Drafting and Design. In addition, he had served eight years as a Military Police Officer within the US Army Reserves. With his past and current educational experiences as an educator, he has been able to assist with removing any academic barriers regarding online learning. Such barriers can stem from those that could affect accessibility, development of online engagement, online learning and constraints relating to learning resources, time management, and delivery of assignments. Along with continued discovery towards refining one's online academic engagement, his role is to collaborate with Faculty and Staff in order to assist with content comprehension.

### CONTACT INFORMATION

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E-mail: [ntheodule@lakewood.edu](mailto:ntheodule@lakewood.edu)

Cell Phone: 800-517-0857 X 795

### ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

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All members of the Lakewood University community who use the school's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing [info@lakewood.edu](mailto:info@lakewood.edu)

### BOOKS AND RESOURCES

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Stephen D. Burd, Systems Architecture, 7th Edition, 2016.

### EVALUATION METHOD

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Graded work will receive a numeric score reflecting the quality of performance.

Course Requirement Summary

- Assignments - Total of 160 Points
- Weekly discussion forums-Total of 80 Points
- Final Exam - 50 Points

# GRADING SCALE

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Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 190. To determine the final grade, the student's earned points are divided by 190.

Your overall course grade will be determined according to the following scale:

A = (90% - 100%)  
B = (80% - 89%)  
C = (70% - 79%)  
D = (60% - 69%)  
F = (Below 60%)

# ACADEMIC INTEGRITY/ PLAGIARISM:

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Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

# DISABILITY ACCOMMODATIONS

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Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: [disabilityservices@lakewood.edu](mailto:disabilityservices@lakewood.edu)

# SUPPLEMENTAL TEXTS

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You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- [https://www.mylakewoodu.com/pluginfile.php/118179/mod\\_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf](https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf)

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/general\\_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)

# LIBRARY

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Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at [modell@lakewood.edu](mailto:modell@lakewood.edu) or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: <https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020>

She can assist you with navigating LIRN, research, citations etc.

# SUPPORT

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Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2  
[info@lakewood.edu](mailto:info@lakewood.edu)  
[studentservices@lakewood.edu](mailto:studentservices@lakewood.edu)

# CAREER SERVICES

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Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2  
[careerservices@lakewood.edu](mailto:careerservices@lakewood.edu)

# LESSONS

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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none"><li>Computer Technology: Your Need to Know</li><li>Introduction To Systems Architecture</li></ul>	<ul style="list-style-type: none"><li>Study Course Syllabus</li><li>Read Chapters 1 &amp; 2</li><li>Participate in the Discussion Forum</li><li>Complete Assignment 1</li><li>Lesson Evaluation</li></ul>	Completion of the following items: <ul style="list-style-type: none"><li>Discussion Forum</li><li>Assignment 1</li></ul>	Objective 1
Lesson #2	<ul style="list-style-type: none"><li>Data Representation</li><li>Processor Technology and Architecture</li></ul>	<ul style="list-style-type: none"><li>Read Chapters 3 &amp; 4</li><li>Participate in the Discussion Forum</li><li>Complete Assignment 2</li><li>Lesson Evaluation</li></ul>	Completion of the following items: <ul style="list-style-type: none"><li>Discussion Forum</li><li>Assignment 2</li></ul>	Objective 2
Lesson #3	<ul style="list-style-type: none"><li>Data Storage Technology</li><li>System Integration and Performance</li></ul>	<ul style="list-style-type: none"><li>Read Chapters 5 &amp; 6</li><li>Participate in the Discussion Forum</li><li>Complete Assignment 3</li><li>Lesson Evaluation</li></ul>	Completion of the following items: <ul style="list-style-type: none"><li>Discussion Forum</li></ul>	Objective 3

- Assignment 3

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #4	<ul style="list-style-type: none"> <li>• Input/Output Technology</li> <li>• Data and Network Communication Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Read Chapters 7 &amp; 8</li> <li>• Participate in the Discussion Forum</li> <li>• Complete Assignment 4</li> <li>• Lesson Evaluation</li> </ul>	Completion of the following items: <ul style="list-style-type: none"> <li>• Discussion Forum</li> <li>• Assignment 4</li> </ul>	Objective 4
Lesson #5	<ul style="list-style-type: none"> <li>• Computer Networks</li> <li>• Application Development</li> </ul>	<ul style="list-style-type: none"> <li>• Read Chapters 9 &amp; 10</li> <li>• Participate in the Discussion Forum</li> <li>• Complete Assignment 5</li> <li>• Lesson Evaluation</li> </ul>	Completion of the following items: <ul style="list-style-type: none"> <li>• Discussion Forum</li> <li>• Assignment 5</li> </ul>	Objective 5
Lesson #6	<ul style="list-style-type: none"> <li>• Operating Systems</li> <li>• Secondary Storage Management</li> </ul>	<ul style="list-style-type: none"> <li>• Read Chapters 11 &amp; 12</li> <li>• Participate in the Discussion Forum</li> <li>• Complete Assignment 6</li> <li>• Lesson Evaluation</li> </ul>	Completion of the following items: <ul style="list-style-type: none"> <li>• Discussion Forum</li> <li>• Assignment 6</li> </ul>	Objective 6
Lesson #7	<ul style="list-style-type: none"> <li>• Internet and Distributed Application Services</li> </ul>	<ul style="list-style-type: none"> <li>• Read Chapter 13</li> <li>• Participate in the Discussion Forum</li> <li>• Complete Assignment 7</li> <li>• Lesson Evaluation</li> </ul>	Completion of the following items: <ul style="list-style-type: none"> <li>• Discussion Forum</li> <li>• Assignment 7</li> </ul>	Objective 7
Lesson #8	<ul style="list-style-type: none"> <li>• System Administration</li> </ul>	<ul style="list-style-type: none"> <li>• Read Chapter 14</li> <li>• Participate in the Discussion Forum</li> <li>• Complete Assignment 8</li> <li>• Complete the Final Project Case Study</li> <li>• Request the Next Course</li> <li>• Lesson Evaluation</li> <li>• THANKS FOR A GREAT CLASS</li> </ul>	Completion of the following items: <ul style="list-style-type: none"> <li>• Discussion Forum</li> <li>• Assignment 8</li> <li>• Final Project Case Study</li> </ul>	

## DESCRIPTION

This course will provide students with the knowledge to analyze the system integration requirements and apply appropriate frameworks, methodologies, techniques so that they can manage, administer, acquire, develop, implement, and integrate enterprise system.

### Program Objectives

1. Students will learn the importance of computer technology and its relationship to systems architecture
2. Students will gain the understanding of data representation and process, and technology and architecture.
3. Students will understand the importance of data storage technology, and system integration and performance.
4. Students will learn how to integrate input/output technology with data and network communication technology.
5. Students will learn demonstrate mastery in computer networks and application development.

6. Student will learn and understand systems, and its relationship to secondary storage management.
7. Students will gain knowledge and demonstrate skills in using the internet, and its relationship to distributed application services.
8. Students will demonstrate mastery in system administration

## OBJECTIVES

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1. Students will learn the importance of computer technology and its relationship to systems architecture
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7. Students will gain knowledge and demonstrate skills in using the internet, and its relationship to distributed application services.
8. Students will demonstrate mastery in system administration