Graduate Course Syllabus

IT 665: Client/Server Systems
Center: Online

Course Prerequisites
IT 511 and IT 650

Course Description
This course focuses on the elements and methodologies used in the development of client/server applications. Students design and build client applications that manipulate data in a shared database environment on a network. Topics include user interface design, object-oriented design, data management, and data security. Theoretical concepts are reinforced with applications. The course is project-oriented, with students implementing projects using a front-end application development language.

Course Outcomes
- Determine the component and architectural requirements necessary for implementing client/server systems that meet organizational needs
- Recommend strategies and procedures that mitigate common security vulnerabilities of client-side applications and server-side databases
- Integrate client-side applications with server-side databases in client/server systems for properly extracting and displaying organizational data
- Recommend data validation measures and enhancements for client-side applications and server-side databases that will ensure the integrity of organizational data
- Augment server-side databases for enhancing the functionality of client/server systems

Required Materials
Using your learning resources is critical to your success in this course. Please purchase directly through the SNHU Online Bookstore rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the IT Service Desk, your advisor, and the instructor can provide you with support if you have problems.

PluralSight
This course uses PluralSight as a required resource in place of a traditional textbook.

Pluralsight 12 Month Subscription
Pluralsight
Pluralsight Llc

2016
ISBN: 978-0-692-50853-4

You are required to purchase the code via the bookstore, which will give you one year of access to the entire PluralSight library. After purchasing the code, you will receive an email from the vendor that includes a code and outlines how to access the different components.

Software Requirement
This course requires use of SNHU's virtual desktop (VDI) environment. Directions to access the VDI are available here: VDI Instructions.

Within the VDI environment, you will be accessing SQL Server. Instructions to access this software are available here: Accessing SQL Server.

Diversity, Equity, and Inclusion
As indicated in our core values, SNHU is committed to "embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life."

This may or will be reflected in SNHU's curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the Office of Diversity and Inclusion.

Instructor Availability and Response Time
Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment's due date, or within seven days of a late submission.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	7	30	210
Assignments	5	40	200
Journal	1	20	20
Final Project			
Milestone One	1	60	60
Milestone Two	1	60	60
Milestone Three	1	75	75
Final Project Submission			
Submission I	1	200	200
Submission II	1	175	175
			Total Course Points: 1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

Grade	Numerical Equivalent	Points
A	93–100	4.00
A-	90–92	3.67
B+	87–89	3.33
B	83–86	3.00
B-	80–82	2.67
C+	77–79	2.33
C	73–76	2.00
F	0–72	0.00
I	Incomplete	
IF	Incomplete/Failure *	
W	Withdrawn	

* Please refer to the policy page for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and

discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	Networks, Servers, and Architecture 1-1 Discussion: Networks and Databases 1-2 Assignment: Evidence of VDI 1-3 Final Project Review: Recommendations Report and Client/Server Enhancement With Diagnostic Analysis
2	Security and Data Protection 2-1 Discussion: Database Protection 2-2 Assignment: Going Global
3	Database Fundamentals 3-1 Assignment: Exploring AdventureWorks 3-2 Final Project Milestone One: Draft of Organizational Needs Recommendations
4	Accessing Databases 4-1 Discussion: Extracting Database Information 4-2 Assignment: Creating Secure Interfaces
5	Administration and Maintenance 5-1 Discussion: Administration and Maintenance 5-2 Final Project Milestone Two: Draft of Data Security and Integrity Recommendations
6	Application Servers 6-1 Discussion: Application Servers 6-2 Journal: AdventureWorks Application Servers
7	Controls and Validating Data 7-1 Assignment: Implementing Controls 7-2 Final Project Milestone Three: Draft of Client/Server Enhancement
8	Client/Server System Diagnostic 8-1 Discussion: Diagnostic Analysis 8-2 Ungraded Reminder
9	Recommendations Report and Client/Server Enhancement With Diagnostic Analysis 9-1 Final Project Prompt I Submission: Recommendations Report and Client/Server Enhancement With Diagnostic Analysis 9-2 Final Project Prompt II Submission: Recommendations Report and Client/Server Enhancement With Diagnostic Analysis
10	Capitalizing on Analytics 10-1 Discussion: Analytic Services

Course Participation

Course participation is required within the first week of the term for all online courses. *Participation* in this context is defined as completing one graded assignment during the first week of the course. Otherwise, students will be administratively removed for nonparticipation. Students who do not participate during the first week may forfeit

their rights to be reinstated into the course. Students who stop attending a course after the first week and who do not officially withdraw will receive a grade calculated based on all submitted and missed graded assignments for the course. Missed assignments will earn a grade of zero. See the course withdrawal policy and the full attendance policy for further information.

Late Assignments

Students who need extra time may submit assignments (excluding discussion board postings) up to one week after the assignment due date. Discussion board submissions will not be accepted for credit after the deadline except in extenuating circumstances.

- A penalty of 10 percent of the total value of the assignment will be applied to the grade achieved on the late assignment regardless of the day of the week on which the work is submitted.
- Students who submit assignments more than one week late will receive a grade of zero on the assignment unless they have made prior arrangements with the instructor.

Students must submit all assignments no later than 11:59 p.m. (in their own time zone) on the last day of the term. No assignments are accepted after the last day of the term unless an incomplete has been submitted. See the incomplete grades policy.

There may be times an instructor makes an exception to the late assignment policy. Instructors may accept late work, including discussion board posts, with or without prior arrangement.

- Exceptions to the late policy on these grounds are left to the instructor's discretion, including whether the late penalty is applied or waived. Students should not assume that they will be allowed to submit assignments after the due dates.
- If an instructor finds that they are unable to determine whether an exception to the late policy would be appropriate without documentation, the collection and review of student documentation should be handled through the Dispute Resolution team in order to protect the student's privacy. In these cases, students should file a Student Concern Dispute form to have the circumstances reviewed.

If a student is experiencing (or knows they will experience) a circumstance, including pregnancy, that is protected under the Americans with Disabilities Act or Title IX, they are encouraged to contact the Online Accessibility Center (OAC) as soon as possible to explore what academic accommodations might be offered. Instructors must honor all deadlines established through the OAC.

Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted the ADA/504 Grievances Policy (version 1.2 effective October 16, 2017), providing for prompt and equitable resolution of complaints regarding any action prohibited by Section 504 or the ADA.

For further information on accessibility support and services, visit the Disability and Accessibility Services webpage.

Academic Integrity Policy
Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the full academic integrity policy.

Copyright Policy
Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

Withdrawal Policy
Review the full withdrawal policy.

Southern New Hampshire University Policies
More information about SNHU policies can be found on the policy page.