UNIVERSITY OF NORTH CAROLINA WILMINGTON
MIS 413 – SYSTEM DESIGN/CAPSTONE PROJECT
2023 – SPRING SEMESTER

DAYS	SECTION	TIME	ROOM
Tuesday	001	8:00-	CG 1003
Thursday		9:15 a.m.	

Class Web Site: https://csbapp.uncw.edu/janickit/mis413

INSTRUCTOR
Tom Janicki
Phone 910.962.4077
E-Mail: janickit@uncw.edu (quickest way to reach me)
http://www.csb.uncw.edu/people/janickit/

OFFICE / HOURS
Congdon Hall 1022
Tuesdays: 2 to 3 p.m.
Wednesdays: 9:30 a.m. to Noon and 2 to 4p.m.
Thursdays: 9:30 a.m. to Noon and 2 to 4 p.m.

TEXTBOOK & MATERIALS RECOMMENDED

None Required / will use Web Resources

Installing Visual Studio 2019 Community Edition and MS SQL Management Studio Tools would be helpful.
Both software packages are available free on the web.

PREREQUISITES   MIS 316 and MIS 411

COURSE DESCRIPTION

Capstone course for the MIS discipline. Students will combine concepts from the database, systems design, and business application programming courses to design, build and implement a web based solution to a real world problem. Full stack development of systems will be discussed and partially implemented.

OVERALL COURSE OBJECTIVES

Upon completion of this course, you will be able to:

1. Implement components of a 'full stack' solution to a user problem
2. Implement an end user / client to understand their needs for a system
3. Develop a list of user requirements. Work with real clients to understand their requirements and then develop a small site in support of their needs.
4. Design and implement a system to meet user requirements
5. Build and maintain a SQL database to support a user's needs
6. Build / Implement a web based solution using ASP.Net on a Microsoft.Net platform
7. Practice the use of version control when developing systems
8. Update SQL databases on a server with data from web pages using ASP.Net (Active Server Pages) on the Microsoft.Net platform.
9. Understand the use of CSS(Cascading Style Sheets), skins and themes.

METHODS OF TEACHING

This course will blend lectures, lab assignments, and homework assignments to help participants obtain the knowledge and skills to manage data in real world applications. Periodically the class will meet virtually to permit group / team work.

STUDENT RESPONSIBILITIES

COVID STATEMENT
Following CDC Guidelines, UNC System directives, and out of mutual respect as outlined in the UNCW Seahawk Respect Compact, all faculty, staff, and students will wear face coverings while inside buildings. Students who are unprepared or unwilling to wear protective face coverings will not be permitted to participate in face-to-face sessions and will need to leave the building. Noncompliant students will be referred to the Dean of Students for a Code of Student Conduct violation. Any student who has a medical concern with wearing a face covering should contact the Disability Resource Center at (910) 962-7555.

STUDENT ILLNESS
Students are to do a health check each day before coming to campus. Students who experience COVID-19 symptoms should immediately contact the Abrons Student Health Center at (910) 962-3280. If a student becomes ill, s/he should let the professor know and must not attend the course in-person. If a student is too ill to attend virtually, they will be given the opportunity to complete the material asynchronously.

HONOR CODE
The University of North Carolina Wilmington is a community of high academic standards where academic integrity is valued. All students enrolled at UNCW are subject to the UNCW Student Academic Honor Code. Disciplinary action will ensue when students fail

to align themselves with the ideals and expectations outlined in the Honor Code. The full text of the Honor Code may be accessed via the following link: UNCW Honor Code.

SEAHAWK RESPECT COMPACT
In the pursuit of excellence, UNC Wilmington actively fosters, encourages, and promotes inclusiveness, mutual respect, acceptance, and open-mindedness among students, faculty, staff and the broader community.
~ We affirm the dignity of all persons.
~ We promote the right of every person to participate in the free exchange of thoughts and opinions within a climate of civility and mutual respect.
~ We strive for openness and mutual understanding to learn from differences in people, ideas and opinions
~ We foster an environment of respect for each individual, even where differences exist, by eliminating prejudice and discrimination through education and interaction with others.

Therefore, we expect members of the campus community to honor these principles as fundamental to our ongoing efforts to increase access to and inclusion in a community that nurtures learning and growth for all.

CODE OF STUDENT CONDUCT
This course is subject to the Code of Student Life of the University of North Carolina Wilmington (the Code). The full Code is found here Code of Student Life . UNCW practices zero tolerance for violence and harassment of any kind. For emergencies, contact UNCW CARE at 910.962.2273 or Campus Police at 910.962.3184. For University or community resources visit Safe Relate Campus Resources.

RELIGIOUS OBSERVANCE POLICY
In accordance with NC SL 2010-211, students are entitled to two excused absences for religious observances per academic year. These absences must be requested using the form provided on SeaNet, under "Student Services." These requests must be submitted by the student prior to the absence. Once the request is submitted, an email will be sent to all impacted instructors automatically. There is no need to send additional notification to instructors or the Registrar's Office. Any absence for religious purposes will be considered unexcused unless the appropriate form is submitted.

STUDENTS WITH DISABILITIES
If you are a student with a disability and need accommodations, you must be registered with Disability Services (DePaolo Hall, 910.962.7555). Please provide your Accommodations Letter within the first week of class or as soon as possible. You should then meet with your instructor to make mutually agreed upon arrangements based upon the recommendations in the Accommodations Letter. For additional information, please see UNCW Disability.

DISASTER CONTINGENCY PLAN
In the event that UNCW closes, students will be given an assignment to make up for 1 week of missed class time. This will be emailed to students within two days of the UNCW closing announcement. In the event that the rest of the semester is online, students need to be prepared by having reliable internet access, a webcam and a microphone.

FACULTY ILLNESS

Should the professor of this class become ill and unable to teach the class in person or virtually, a substitute professor will be appointed by the department chair. The course will proceed as closely as possible to the assigned syllabus.

SYLLABUS CHANGE POLICY

This syllabus reflects expectations for the course; however, the instructor may find it necessary to make changes in the syllabus, including the course calendar, after the course begins. In this event, students will be notified accordingly.

EXPECTED STUDENT BEHAVIOR FOR IN-PERSON CLASS INSTRUCTION

Students are expected to keep cloth masks on the entire time they are in the building, including time in the classroom. They are expected to wash hands with soap and water or use hand sanitizers frequently. There will be sanitizing wipes available in each classroom and each student is expected to wipe down the work area they will be in contact with before beginning the class (and throw away these wipes, please). Students are to keep a safe distance while sitting in the class and while getting into and out of the classroom.

EXPECTED STUDENT BEHAVIOR

Students are expected to exhibit conduct that is courteous to the instructor and to the other students. Talking during class, reading of newspapers or other materials, and doing work for other courses during this class are examples of conduct that is considered to be unacceptable. Use of mobile phones, texting while in class or in the lab will not be acceptable and you will be asked to leave the class. It is rude to other students and the instructor to use your phone or text during scheduled class periods.

LEARNING EXPECTATIONS

The student is responsible for doing all assigned readings and grasping all the material presented in class which may or may not originate from the textbook. The student will be responsible for the material covered in the lectures, assigned textbook readings and other reading assignments whether or not covered in the class lectures. IF YOU DO NOT UNDERSTAND A SUBJECT OR WOULD LIKE A FURTHER EXPLANATION, DON'T BE AFRAID TO ASK. . . YOU ARE PROBABLY NOT THE ONLY ONE WHO NEEDS HELP.

The student is responsible for submitting the assignments when scheduled by the instructor. Absence from class does not excuse the student from any assignments made during the class period. Each student is expected to address the assignments individually.

PLAGIARISM

Please be especially familiar with UNCW's position on plagiarism as outlined in the UNCW Student Handbook. Plagiarism is a form of academic dishonesty in which you take someone else's ideas and represent them as your own. Cheating of any kind shall result in a grade of zero (0) on the assignment or quiz in question**; with a minimum deduction of one letter grade should the assignment be worth less than 10%.** Collaboration, copying of other individual's code, or handing in the work of others is considered cheating.

GRADING

Grades will be posted on the web. It is the student's responsibility to check the posted grade frequently. ***Questions pertaining to projects MUST be made within 1 weeks of when the project is posted to Entropy. No adjustments will be made after the one week period.***

LABORATORY ASSIGNMENTS AND SOFTWARE:

The course requires work on a computer <u>outside of the scheduled classes</u>. The actual amount of time required will vary from student to student. The student is responsible for arranging his/her individual schedule so that the student can spend the required time on the computer. Computer assignments can be completed using the facilities in the UNCW computer labs or other computers or from home using horizon.uncw.edu (Horizon Cloud Application) Students enrolled should download Microsoft Visual Studio.Net 2019 from the department's web site related to the Microsoft Academic Alliance (you only need to install the framework and only the C# of the languages).

It is recommended that each student should print off the instructions on how to use the UNCW student VPN (Virtual Private Network) to access your files on the student development server from home. You should print off the instructions while on campus as they are not accessible off campus.

EVALUATION

The student's performance evaluation (grade) will be based on the following:

1. **Implementation of various full stack development components**: Your real application will be completed during the semester. The project will count as **65%** of your final grade, however there will be checkpoints that particular parts of the project will be required to be completed by a specific date and a grade for that portion of the project will be given. Each member of a team will be responsible for their specific segments of the projects and will be graded individually (after the database design is complete). It is anticipated that there will be 10 checkpoints throughout the semester.

    Late assignments <u>will</u> be accepted with a <u>10% per day</u> deduction. However you must submit within 2 days of the due date for any credit. Instructor reserves the right to verbally review submitted assignments with the student and to modify the grade after the review.

Client Checkpoints will be graded using the following criteria:
- software development style (logical) with proper variable names, indentation, etc.
- effective use of new programming and syntax concepts
- free of bugs (I will attempt to get the program to fail)
- **comments** and documentation within the code. Each aspx.vb page must have the following at a minimum: At the top of the page (above IMPORTS): your name, month and date created, and the purpose of the page. In additional key

subroutines should have their purposed explained in a comment. Finally all pages should have a unique TITLE tag.

2**. Mini Quizzes –** will occur periodically during the during the semester and will count as **5%** of your grade

3. **Quality Assurance** – periodically you will review and critique team member's work to date. Your job will be to assist them to make the page more user friendly and reduce errors. Will count as **5%** of your grade.

4. **Quiz -** one quiz will occur and count as **20%** of your grade

5. **Final Presentation (teams of two)** will count as **5%** of your grade.

The following is the grading scale for this course:

93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	Below 60	F

SEE ENTROPY FOR PROJECTS AND DUE DATE