**Fayetteville Technical Community College**

**SYLLABUS**

**SPRING 2022**

**Course:**

Prefix, Section Number, and Title: **CSC 289** Programming Capstone Project

Day(s) and Time(s): M 3pm-3:50pm

Class Begins: 1/10 Class Ends: 5/11

# Instructor:

Instructor: Andrew Norris

Office Location: ATC 113C

Office Hours: See Blackboard

Phone: 910-486-3967

Email: norrisa@faytechcc.edu

# To Contact the Department/Division Chair:

Department Name: Information Technology/Computer Programming & Development

Department Chair: Anthony Cameron

Office Location: ATC 113F

Phone: 678-8571

Email: camerona@faytechcc.edu

# To Contact the Dean

Dean: Tenette Prevatte

Office Location: GCB 215A

Phone: 678-7353

Email: [prevattt@faytechcc.edu](mailto:prevattt@faytechcc.edu)

# Course Prerequisites: CSC 285

# Course Co-requisites: None

# Course Description:

This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation. Upon completion, the student will be able to function as a programmer or programmer-analyst in a business data processing environment.

# Class Hours: 1 Lab Hours: 4 Clinic Hours: 0 Credit Hours: 3

# Course Objectives:

By the end of the semester, the student must be able to demonstrate the understanding of topics below through tests, labs, and discussions.

* Design software based on customer requirements
* Determine requirements for a software product based on a concept
* Create software design diagrams and documentation
* Design and document a software product
* Contribute as part of a software development team
* Develop and deploy software solutions in a hands-on environment
* Present design proposal and final project deliverable in a group environment

# FTCC General Education Core Competencies:

1. Communicate effectively using the conventions of American Standard English in professional and academic environments.
2. Use critical thinking to analyze problems and make logical decisions.
3. Demonstrate socialization skills that support cultural awareness and a global perspective.
4. Demonstrate quantitative competencies.
5. Demonstrate computer literacy.

# Required Textbooks:

None. (Material from your CTS 285 textbook will be useful for reference)

# Recommended/Optional Resources: None

# Other Required Materials/Software:

You should bring a USB flash drive for file storage. Some files may be too large to easily transfer over email.

To access your Blackboard course site, you will need access to the internet. For best results, use Mozilla Firefox, Google Chrome, or Safari in the most updated version. Keep in mind that if you have difficulties connecting to the class or a slow connection, the problem could be occurring at many levels. Blackboard Technical Support is available at any time, seven days a week by calling 1-888-829-9660.

Microsoft Office 365 (Office 2016) is available to currently enrolled students at FTCC. The Microsoft Office 2016 app is available for download on up to five (5) computers and/or mobile devices. Direct link to download Office 365: [https://login.microsoftonline.com](https://login.microsoftonline.com/) (opens in a new window). Username and Password: Active Directory (WebAdvisor) account.

Windows 7 or later operating system versions, Office 2010/2013

Cloud storage account or flash drive( a flash drive is highly preferred)

GitHub account

# Computer Access:

It is highly recommended that you have reliable computer access, via a home or public computer with internet access. Open computer labs are available in multiple locations on campus.

# Technical Skill Requirements:

You should be comfortable with the following:

* Using your development environment of choice
* Using GitHub repositories

# Course Interaction:

## Student Responsibilities:

1. Required enrollment assignment. I will complete the enrollment activity by the posted ten percent date of the course. The date is clearly posted in the Blackboard Site. Failure to complete this activity could result in being dropped from the course.
2. I will ask questions directly and immediately if I do not understand the instructions or due dates for an assignment.
3. I will organize my time in a way that allows me to thoughtfully and thoroughly complete assignments.
4. I will be responsible for keeping up with when assignments are due and submitting them on time or before they are due.
5. I understand that technical problems related to computer connections or equipment cannot be used as an excuse for failure to complete assignments or to participate online.
6. I understand that technical problems with email require that I contact the FTCC Help Desk at 910-678-8502 for technical support.
7. I understand that technical problems with Blackboard require that I contact Blackboard Technical Support, which is available at any time, seven days a week by calling 1-866-829-9660.
8. I will fully participate in course activities by being prepared and interacting respectfully with my classmates and instructor. I understand that participation in all course components is a requirement of this course and that it counts toward my grade. **Expected Student Participation Level:**

**BLACKBOARD: Log on to the Blackboard site at least three times per week. This necessary for students to keep abreast of assignments, utilize provided online resources and take part in discussion boards.**

**EMAIL: Always use your student email to contact your instructor. Please include your section number in all email correspondence. Note: Do not use Yahoo or hotmail accounts. Check and answer your e-mail at least three times per week**

**PERSONAL INFORMATION: Make sure your phone number is correct with the Registrar's office. If your instructor attempts to contact you by phone and the phone number listed with the Registrar is incorrect or has been disconnected, and e-mail is not working, it is assumed you are no longer able to complete the course. You may correct your personal information through WebAdvisor, if needed.**

**ONLINE: You may also contact the instructor and/or classmates through the Help Topic on the discussion board.**

## Instructor Responsibilities:

1. Instructors will respond to emails and phone calls within 24 hours, Monday through Friday; within 48 hours on weekends and holidays.
2. Instructors will lead and participate in all discussion assignments.
3. Instructors will post grades and provide feedback within 5-7 days.
4. Instructors will observe regularly scheduled office hours.

## Attendance–Time Commitment:

Attendance is essential for maintaining the best learning environment in all course formats. Attendance may be taken separately in each portion of a course (i.e., class, lab, clinic, online). Missing 20% of any portion of a course may result in administrative withdrawal. Special attendance policies are in effect for certain programs (refer to the current FTCC Student Handbook).

**Task Completion (Assignment Submission / test completion)**

This class IS NOT SELF-PACED. NOT COMPLETING WORK FOR a period of two weeks, for both online and face-to-face classes, is the same as not attending. Note however, that time may vary depending on time required to complete a module.

Students are required to log into the site weekly and complete assignments. Students not completing work regularly could be dropped from class. Contact your instructor if you are having problems to avoid being dropped after missing two weeks (14 days or allocated time) of consecutive assignments.

# Evaluation Techniques:

Your grade in this course will reflect the execution, submission, and quality of the work you produce. Letter grades will be determined on the following weighted categories:

| **Categories** | **Weight** |
| --- | --- |
|  |  |
| Milestone Deliverables (8 @ 5% each) | 40% |
| Team Presentation – Design Pitch | 10% |
| Team Presentation – Final Project Presentation | 20% |
| Final Project Binder | 10% |
| Software Deliverables and Portfolio | 20% |

# Grading Scale:

FTCC grades are based on a 4.0 grading system. Each grade is assigned a “grade-point equivalent” in quality points for each term credit hour scheduled. The grade point average (GPA) is determined by dividing the total of quality points earned by the number of term hours scheduled.

| Numerical Grade | Letter Grade Equivalent | Grade Point Equivalent |
| --- | --- | --- |
| 90-100 | A-Excellent | 4 grade points per credit hour |
| 80-89 | B-Good | 3 grade points per credit hour |
| 70-79 | C-Average | 2 grade points per credit hour |
| 60-69 | D-Below Average | 1 grade point per credit hour |
| 0-59 | F-Failure | 0 grade point |

The complete grading scale description may be found in the current FTCC Student Handbook under “Academic Information.”

# Make-up Policy:

Late academic work submission procedures are as follows:

1. Academic assignments and projects are due by the scheduled/published dates.
2. In general, there is a 10 percent penalty for each business day that an assignment or project is late. For example, if your assignment is due on Tuesday and you submit it on Thursday, the highest possible grade you can earn is a “B.” With each additional day late, there is a 10 percent penalty. Assignments may be submitted no more than one week late without prior approval from your instructor.
3. No late work will be accepted after the 90 percent date of the term without an incomplete grade approval from your instructor.
4. Certain course activities may not be eligible for late submission after the conclusion of the week, module, or unit. These include, but are not limited to, discussion boards, quizzes, and exams.
5. We know that extenuating circumstances can sometime interfere with timely submission of your work. Be sure to tell your instructor right away if you are going to be late with a submission.
6. Extenuating circumstances include, but are not limited to, personal/family member hospitalization, family member death, a severe weather event, a natural disaster, and an active military situation that prevents timely submission of work. Computer-related issues, internet connectivity, and account blocks are generally not considered extenuating circumstances.
7. You may request an extension or alternative arrangement, preferably prior to the due date, but your request does not automatically result in a waiver of the due date or of the penalties for late submissions. Your instructor may also require you to provide documentation of the reason. If your instructor determines that an extension is warranted, they will provide you with the expectations for your submission.

# Academic Integrity-Plagiarism:

Academic dishonesty includes, but is not limited to, the following:

1. Obtaining test information, research papers, notes, and other academic material without authorization.
2. Receiving or giving help on tests, projects, or assignments submitted for a grade unless specifically authorized by the instructor.
3. Plagiarism, which is taking credit for another’s ideas or works as if they were your own.

Penalties for plagiarism and cheating that may be imposed by the instructor include, but are not limited to, the following:

1. Rewriting the assignment.
2. Receiving a “0” on the assignment.
3. Failing the course in which the assignment was submitted.

Penalties for plagiarism and cheating that may be recommended include, but are not limited to, the following:

1. Academic probation.
2. Academic suspension.
3. Expulsion from the college.

# Institutional Statement:

Each student is responsible for being aware of the information contained in the FTCC Catalog, FTCC Student Handbook, Student Code of Conduct policy, and semester information listed in the class schedule. All information may be viewed on the FTCC website.

# Americans with Disabilities Act (ADA):

FTCC facilitates the implementation of reasonable academic accommodations, including resources and services for students with disabilities, chronic medical conditions, a temporary disability, or other health related conditions resulting in difficulties with accessing learning opportunities. All accommodations are coordinated through the Disability Support Services Office located in the Tony Rand Student Center, Room 127, or call 910-678-8349, or 910-678-8559. Please contact the Disability Support Services Office as early in the semester as possible.

Blackboard is an accessible learning management system. Blackboard’s accessibility information can be found at <http://www.blackboard.com/accessibility.html> (opens in new window).

Blackboard’s web conferencing software has limited accessibility. Direct link: <http://www.blackboard.com/platforms/collaborate/products/blackboard-collaborate/web-conferencing/accessibility.aspx> (opens in new window). Please contact the instructor immediately after reviewing the accessibility information provided by Blackboard if you need additional accommodations.

Closed captioning or scripts are provided for all audio and video components created by the instructor.

# Student Support Services:

For a detailed list of student support services, please refer to the Student Support button in Blackboard.

# Syllabus/Schedule Changes:

This syllabus may be changed at the instructor’s discretion, with proper notification to students. Any changes will be promptly noted in Announcements and emailed to the student’s FTCC student email account.

# Outline of Instruction

The software development model (Agile vs. Waterfall)

Agile software development process

Working as a team of software developers

Delivering biweekly milestones

Writing and delivering a software product design pitch

Setting up and using source control, version control, and issue management

Software requirements gathering

Design and documentation of large-scale software products

Implementing, debugging, and testing a software product

Deploying a software product

Creating a final project binder

Writing and delivering a final project presentation