CSC-320-01 Programming C++

**Ferrum College** 

Program: Computer Information Systems School: Art and Sciences

I. Instructor: Dr. Taiwo Ajani

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Office Hours: TBD

(Make sure to email me for appointments ahead of time)

Other times by appointment.

II. Class Meeting Time: TBD

III. Classes meet: TBD

#### IV. Textbooks and Materials:

Harvey M. Deitel, C++ How to Program, Prentice Hall, 4th Edition, 2002.

Also ensure you have a sufficiently large storage mobile device (flash/thumb drive) to store your laboratory/homework files. You are expected to attend class and be on time. When working on homework or program assignments, please feel free to contact me if you need assistance. You may contact me by any of the following means: office phone or e-mail (As listed at the top of this syllabus). It is very important that you check Ferrum e-mail. Important information will be sent to you throughout the semester both by me and other departments across campus. The e-mail account that we will be using to contact you is your Ferrum account which may be accessed on the web. It is fine to maintain other Internet e-mail accounts. However, unless you have those accounts set up to receive your Ferrum mail you may miss some very important information. Having a different e-mail account will not excuse you from anything you may miss by not checking your Ferrum e-mail. I will respond to all e-mail and voice mail messages from you as soon as I possibly can.

#### V. Catalog Course Description:

This is a programming course using the C++ programming language. The program development cycle is used to define, design, code, and test document applications using C++ programming language. Topics covered include variable definitions, selection structures, repetitive structures, function, classes, input/output files, arrays, strings, and pointers. Prerequisites: CSC 101 and either CSC 100 or BUS 230. Three hours, three credits.

### VI. Instructional Methodology and Use of Technology

This course requires a series of assignments and case problems that will utilize the latest tools in Microsoft Office 2016. Instructional approaches include, but are not limited to guided reading, writing, discussions, and presentations. Basic knowledge of computers, Microsoft Office, and the Internet is expected and will prove useful. Frequent access to a computer with internet access will be needed for research work when given.

**BRIGHTSPACE/D2L COURSE MANAGEMENT SYSTEM:** is the official course management software on campus. Course syllabus, lecture notes, assignments and other useful information appertaining to the course will be uploaded onto D2L periodically. While the instructor will endeavor to inform students as new materials becomes available, students are obliged to access D2L for new information, course updates and assignments regularly for the duration of the course.

### VII. Course Objectives

Introduction to computer science, problem solving techniques, and algorithmic processes, software design, structured programming, C++ programming.

### VIII. Expected Learning Outcomes

After completing this course, students will be able to:

- 1. Describe the relationships between computer applications, programming and programming languages.
- 2. Design, code, compile, run, and debug computer programs using C++ programming language.
- 3. Demonstrate an understanding of primitive data types, expressions, strings, arrays and pointers.
- 4. Apply basic computer language concepts such as program flow, conditionals, and loops.

### IX. Course Requirements/Assignments

This course has a strong emphasis on hands-on work to build confidence and skills as well as ability to recall facts; hence, students will be thoroughly tested on their ability to recall facts about C++ programing language. My office hours is posted on my office door. I will try my best to be available when you need me. If you are having problems with the course please send an e-mail or come and see me, I will help you or find help for you. My primary goal is to help you succeed.

In order to apply the theories presented, homework will be assigned. Homework shall consist of reading assignments as well as questions given by me. Please **pay attention to assignment due dates as announced.** All homework must be done by the last date posted on the schedule and <u>no late submissions are usually accepted except with prior permission from me.</u>

Note: No assignments are accepted late without a documented excuse such as a medical emergency. If any assignment were to be accepted for any other reason, your instructor may impose a 10% penalty for each late day. However, no assignment will be accepted beyond one week past the due date and certainly when the assignment has already been graded for others.

Percentage of Grade	Brief Description
Homework Assignments	30%
Project (TBD)	15%
Midterm exam (TBD)	15%
Final Exam (College schedule )	20%
Quizzes	10%
Attendance and participation	10%
Total	100%

<sup>\*</sup> **Read** attendance policy under section XI

# X. Evaluation and Grading Evaluation Scale

90 -100%	А
80 – 89%	В
76 – 79%	С
60 – 69%	D
Below 60%	F

# XI. Attendance Policy:

- a. Students will be checked for attendance at the *beginning* of each class period. 80% **Attendance Record Policy will be strictly enforced**; that is, if you are absent more than 20% of the time, <u>you may automatically receive a letter grade of F</u>, irrespective of your current grade standing at the time this occur.
- b. The student is responsible for keeping a record of missed classes. If a student arrive late for a class, then it is the student's responsibility to contact the instructor to ensure that the student has not been recorded absent for that class.

<sup>\*</sup> **5** points of the project for doing a presentation.

<sup>\*</sup>No makeup for pop quizzes.

- c. Leaving class after the mid-point break without arranging with the instructor will result in being recorded absent for the entire class.
- d. Note that poor attendance **will** affect the *Class Participation/Attendance* component of the student's final grade.
- e. *Important Note:* Should a student miss a class, he/she must obtain class notes, assignment due date, test date, and other information directly from the Ferrum College Omar where the instructor may have posted the information. Alternatively, you may obtain such information from another member of your class, or by visiting the instructor in his office during posted office hours.

#### XII. Classroom Policies:

- 1. You must respect the instructor and your peers at all times in this course.
- 2. No tobacco products, food, or drink will be used in the classroom at any time.
- 3. Cellular telephones, pagers, MP3 players and like technologies are prohibited in the classroom except under special circumstances previously agreed to by the instructor.
- 4. In accordance with Ferrum College policy, the instructor may remove anyone from the classroom if that person is disrupting the learning environment. If you are asked to leave the class for any reason, you will receive an absence for that day.
- 5. Avoid talking with others when lecture is going on. Exception is group or peer-to-peer discussion when authorized by the instructor.
- 6. If using a computer lab for teaching or instruction, you will refrain from using the computers for on-line activities that include visiting unauthorized social networking websites such as facebook, myspace, or other websites unrelated to the class activity.
- 7. Violation of any of these rules will mean being asked to leave the class and an absence will be recorded for that day.

# XIII. Academic Integrity:

In all instances, policies identified in the Ferrum College Catalog and the Ferrum College Student and Faculty Handbooks regarding the Honor System shall be followed. Students are expected to display academic integrity at all times and in all circumstances.

### XIV. Office of Academic Accessibility (OAA):

As directed by Ferrum College's policy, any student with a disability who qualifies for and seeks academic accommodations (such as testing or other services) must work through the Office for Academic Accessibility Services for accommodations. The office is located Lower Stanley Library, Office 110 and the director may be reached by phone at 365-4262 or by email at <a href="mailto:nbeach@ferrum.edu">nbeach@ferrum.edu</a>. Please remember that accommodations cannot be granted retroactively; they must be requested in a timely manner prior to when the accommodation is needed. Students who wish to use accommodations through OAA are encouraged to meet with the director during the first weeks of the semester to discuss the process, and are also invited to read the policy manual on <a href="https://www.ferrum.edu/disability">www.ferrum.edu/disability</a> for specific information.

### XV. Civility in the Classroom Policy

Civil behavior and mutual respect between faculty and students are critical in the college classroom environment if teaching, learning, critical thinking, and sharing of ideas are to occur. Respectful and civil behavior at a very basic level includes the following: turning off cell phones; arriving to class on time; engaging appropriately in classroom activities, lecture, or discussion

through attentive listening without interruption or side chats; and demonstrating the ability to discuss topics without inappropriate language or attacking others (physically or verbally). Students who do not comply with the Civility in the Classroom policy described in the Faculty Handbook and the Student Handbook may be removed from the academic setting and may risk serious consequences as outlined in the Civility policy.

### XVI. Inclement Weather - Academic Plan

"In the event that weather or other conditions prevent classes from meeting on campus, faculty may choose to hold class online and issue alternative assignments electronically. Students should consult BrightSpace and/or their college e-mails regarding adjustments to assignments and course schedules."

# **Course Outlines and topics:**

Introduction to Computers and C++ Programming

Identifiers, Types, Expressions

**Control Structures** 

**Conditions and Selection Statements** 

Loops (For, While, and do While)

**Functions** 

**Arrays** 

**Pointers and Strings** 

<u>Disclaimer</u>: The instructor reserves the right to modify/change the content and order of material presented in the course syllabus as shown above.