Course Syllabus

CSC500: PRINCIPLES OF PROGRAMMING

Credit Hours: 3

Content Hours: This is a 3-credit course, offered in an accelerated format. This means that 16 weeks of material is covered in 8 weeks. The exact number of hours per week that you can expect to spend on each course will vary based upon the weekly coursework, as well as your study style and preferences. You should plan to spend 14-20 hours per week in each course reading material, interacting on the discussion boards, writing papers, completing projects, and doing research.

Faculty Information: Faculty contact information and availability can be found on the announcements.

COURSE DESCRIPTION AND OUTCOMES

Course Prerequisite Knowledge:

None

Course Description:

In this graduate course, students are provided with a detailed overview of fundamental programming, design, and testing concepts. Students are introduced to programming constructs and learn how to plan and create basic programming applications. Students will develop applications using common programming structures, which include conditional statements, switches, loops, iteration control structures, and arrays.

Course Learning Outcomes:

1. Explain the terminology used in programming and the tasks performed by a programmer.
2. Develop applications using variables, constants, selection structures, and repetition structures.
3. Implement a solution that uses arrays.
4. Identify constructs for reading and writing of text files in programming.
5. Develop an application using function procedures and string manipulation.

Course Alignment

CSU Global has developed this course to align with current in-demand job skills. In the table below, the Course learning outcomes are aligned with in-demand job skills and the course assignments and assessments. This information is provided so that students can clearly articulate the job skills achieved and the product of that achievement as they explore current and future career opportunities.

Course Skill Alignment

In this course you will learn (Course Learning Outcome)	In-Demand Skill	Where you will demonstrate your learning (Assignment)
Explain the terminology used in programming and the tasks performed by a programmer.	Software Design & Testing	CT1 PM6 PP8
Develop applications using variables, constants, selection structures, and repetition structures.	Software Design & Testing	CT1 CT3 CT5 PP8
Implement a solution that uses arrays.	Software Design & Testing	CT3

In this course you will learn (Course Learning Outcome)	In-Demand Skill	Where you will demonstrate your learning (Assignment)
Identify constructs for reading and writing of text files in programming.	Software Design & Testing	CT1 CT3 CT5 PM4
Develop an application using function procedures and string manipulation.	Software Design & Testing	CT7 PP8

COURSE MATERIALS

Required:

Vahid, F., Lysecky, R., & Miler, B. (2022). *CSC500: Principles of programming*. zyBooks. www.zybooks.com. ISBN: 979-8-203-05060-1

Python programming language software. https://www.python.org/

Suggested:

Gaddis, T. (2018). *Starting out with Python* (4th ed). Pearson: New York. eText ISBN 9780134484693, Print 9780134444321

NOTE: *All non-textbook required readings and materials necessary to complete assignments, discussions, and/or supplemental or required exercises are provided within the course itself. Please read through each course module carefully.*

Note: To print this syllabus or any of your lecture content please follow the steps below:

- Go to the page you want to print
  - If you are using a PC use the shortcut of CTRL + P
  - If you are using a Mac use the shortcut of COMMAND + P
- Repeat as necessary on any page you want to print.

PARTICIPATION & ATTENDANCE

Prompt and consistent attendance in your online courses is essential for your success at CSU Global Campus. Failure to verify your attendance within the first seven (7) days of this course will result in your withdrawal. If, for any reason, you would like to drop a course, please contact your advisor.

In order to verify your attendance throughout this course, CSU Global encourages you to actively engage during every week of the term. Active engagement includes the following tasks:

- Submitting an assignment
- Posting to a graded discussion board
- Responding to a post on a graded discussion board

You must engage in one of the aforementioned tasks to verify your attendance within the first official week of the course (Monday through Sunday, not including the open house). Otherwise, you will be dropped from this course.

Academic engagement will be monitored on a weekly basis. Students who have not actively engaged for 14 consecutive days will receive an At-Risk Email requesting that the student academically engage in their course within seven days, or they will be administratively withdrawn from courses. If the student has not participated after 21 days, the student will be administratively withdrawn from the course.

Online classes have deadlines, assignments, and participation requirements similar to any other college class. Budget your time carefully and keep an open line of communication with your instructor. If you are having technical problems, problems with your assignments, or other problems that are impeding your progress, let your instructor know as soon as possible.

COURSE SCHEDULE

The Academic Week at CSU Global begins on Monday and ends the following Sunday. The following components are present in this course:

- **Readings:** There are weekly required readings in addition to the interactive lectures. The readings may include chapters from the required textbook, or linked articles, videos and other resources. Review the For Your Success page of the Interactive Module Lectures for details about the assigned readings.
- **Discussion Boards:** There is a weekly Discussion Board assignment worth 30 points. The original post must be completed by Thursday at 11:59 p.m. MT and Peer Responses posted by Sunday 11:59 p.m. MT. Late posts may not be awarded points.
- **Critical Thinking Assignments:** These are due Sunday at 11:59 p.m. MT of the week assigned.
- **Portfolio Project Milestones:** These are due Sunday at 11:59 p.m. MT of the week assigned.
- **Portfolio Project:** This is due Sunday at 11:59 p.m. MT of the last week of the course.

GRADEBOOK

MODULE#	CRITICAL THINKING ASSIGNMENTS	PORTFOLIO MILESTONES & FINAL PROJECT	DISCUSSIONS
1	100	0	30
2	0	0	30
3	100	0	30
4	0	75	30
5	100	0	30
6	0	75	30
7	100	0	30
8	0	210	30
TOTALS 1000 POINTS	**400**	**360**	**240**

Grading Scale:

Grade	Range
A	100 % to 95.0%
A-	< 95.0 % to 90.0%
B+	< 90.0 % to 86.7%
B	< 86.7 % to 83.3%
B-	< 83.3 % to 80.0%
C+	< 80.0 % to 75.0%
C	< 75.0 % to 70.0%

Grade	Range
D	< 70.0 % to 60.0%
F	< 60.0 % to 0.0%

STUDENT POLICIES

All students are expected to adhere to the University Student Policies (https://csuglobal.edu/student-policies) . These include such things as academic integrity, netiquette, course evaluations, late work, incomplete grade policies and more. For comprehensive documentation of CSU Global institutional policies, refer to the Policies section in the Academic Catalog.

Course Summary:

Date	Details	Due
	BioSig-ID™ validation - Module 3: Critical Thinking Assignment (https://csuglobal.instructure.com/courses/115777/assignments/2143800)	
	Module 1: Critical Thinking Assignment (https://csuglobal.instructure.com/courses/115777/assignments/2136668)	
	Module 1: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136623)	
	Module 2: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136616)	
	Module 3: Critical Thinking Assignment (https://csuglobal.instructure.com/courses/115777/assignments/2136669)	
	Module 3: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136611)	

Date	Details	Due
	Module 4: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136607)	
	Module 4: Portfolio Milestone (https://csuglobal.instructure.com/courses/115777/assignments/2136673)	
	Module 5: Critical Thinking Assignment (https://csuglobal.instructure.com/courses/115777/assignments/2136677)	
	Module 5: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136604)	
	Module 6: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136601)	
	Module 6: Portfolio Milestone (https://csuglobal.instructure.com/courses/115777/assignments/2136682)	
	Module 7: Critical Thinking Assignment (https://csuglobal.instructure.com/courses/115777/assignments/2136686)	
	Module 7: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136600)	
	Module 8: Discussion Forum (https://csuglobal.instructure.com/courses/115777/assignments/2136597)	
	Module 8: Portfolio Project (https://csuglobal.instructure.com/courses/115777/assignments/2136691)	
	ZyBooks Course eBook (https://csuglobal.instructure.com/courses/115777/assignments/2136697)	