

Figure 1 COD Logo

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| College of the Desert  Course Syllabus | | |
| Semester: Fall 2022 | | |
| **Course** **Number,** CIS 087 INTRO TO PYTHON 3.0 5.6 WEEKLY HRS | | |
| **Prerequisites:** CIS 10 or CIS 70a Computer Business Apps  Knowledge and skills you should have from this prerequisite include:   * understanding of files and folders * competent understanding of Windows features * ability to use Office software applications * Using computers effectively requires that students can express their instructions in a form that the computer program can understand and execute. * Students must understand what they want to accomplish, what logical steps are required to accomplish the objective, and how to submit instructions to the computer to achieve the required objective. * Compare and contrast the basic categories of system software and application software. * Discuss the significant legal, moral and ethical, and security issues associated with increased * Discuss the importance of electronic data bases and web development to e-commerce. | | |
| Course Description: This course provides an introduction to programming and business applications using Python. The course focuses on developing the fundamental concepts and models of application development including the basic concepts of program design, debugging, data structures, structured and object-oriented programming, problem solving, programming logic, and fundamental design techniques. | | |
| Time and Day Of Class Meeting: This class will be conducted entirely online | | |
| Location Of Class: Online | | |
| Name of instructor: **James Powell** | | |
| Contacting you instructor / Office Hours: I am available online through email. I check my email every day, this means you should expect a reply from me within 24 hours, it is possible it would be 48 hours depending on when you sent your email and I reserve it. I will reply to every email, if you don’t get a reply, I may not have received your email. On very rare occasions, an email may not go through, send me another email.   1. Canvas Messaging (This is the best way to contact me) 2. jpowell@collegeofthedesert.edu 3. I will have Canvas Massager and email open from 2:00 to 4:00 pm on Tuesday. 4. My phone number is [760-346-8041](tel:+1-760-346-8041) ex. 5986 (This is not the best way to contact me) 5. Canvas Contact your instructor.  Canvas Help: If you are having problems with Canvas, go to Canvas help, then contact their help desk, before contacting your instructor. | | |
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| E-Mail Of Instructor: jpowell@collegeofthedesert.edu | | |
| Text:  Text: Fundamentals of Python: First Programs, 2nd Edition  Kenneth A. Lambert  Copyright 2019  ISBN: 9781337560092 | | |
| Supplementary Reading(S) And/or Materials:  See Information on Canvas  Other Materials:1 USB Drive is recommended for saving and back up. | | |
|  | Missed Exams/Make-Up Exams Or Assignments: Missed exams are assigned the numeric grade of 0. If you need to miss an exam, you must notify the instructor in advance. |
|  | Missed Assignments/Make-Up Assignments: Assignments may be turned in late, provide they are all turned in by one week prior to the day of final exams. Late work will be penalized 50% of the possible point value.  Missed Discussion and Replies:discussions or replies will not receive any points if submitted late.  Missed Assignments the first week of class “No Show”:Students missing any assignments the first week of class are subject to removal from the class. These assignments include discussions, replies to discussions, and syllabus quiz. |
|  | Assignment Points:Assignments and Exams will be given points according to the following:  Syllabus quiz 10 points  Posts to discussion board: 10x15 150 points  Replies to discussion board: 5x30 150 points  Intro to computers quiz 40 points  Algorithms, Logic, Flowcharts 30 Points  Review Quizzes 20 x 11 220 points  Exercises: 30 x 11 330 points  Projects: 10 x 33 330 points  Midterm exam: 100 points  Midterm programming project 100 points  Final programming project 200 points  Final exam: 100 points  Total available points: 1,760 points |
| Grading:The following grading scale will be applied –  90% - 100% = A  80% - 89% = B  70% - 79% = C  60% -69% = D  BELOW 59% = F  Your percentage achievement will be computed by dividing your cumulative point total by total points possible.  Grade notification:Your assignments and semester grade will be posted on Canvas and your COD Portal. | | |  |
|  | Suggestions for Success In This Course: Work ahead  All of the assignments for the semester are available weeks in advance and can be submitted early (although you will not receive a grade or comments until the week the program is due).  Discussions and Replies cannot be submitted early.  Complete assigned work on time.  Get help from your instructor, tutors, or classmates. | |

# Student Learning Outcomes

Upon completion of this class the student will be able to:

1. Describe and apply the software development life-cycle to a given problem.
2. Explain what an algorithm is and then be able to translate an algorithm into a programming language.
3. Describe, design, implement, and test programs using currently accepted methodology and control structures.

# Transfer

This course is transferable to CSUSB as an elective.

# Course Objectives

a. Describe the software development life-cycle.

b. Define and use proper high-level programming language structure and syntax.

c. Explain and develop algorithms for solving simple problems.

d. Describe the principles of programming and be able to describe, design, implement, test, and debug these programs using currently accepted methodology.

e. Describe the internal representation of characters, strings, records, and arrays.

# Course Contents

* Programming language structure, syntax and commands to include:

1.Survey of current languages

2. Program design tools and programming environments

3. Using documentation

4. Software life-cycle including design, development, styles, documentation, testing and maintenance. 5. Programming with Numbers and Strings

6. Objects and Graphics

7. Sequences

8. Strings

9. Lists

10. Sets and Dictionaries

11. Files

12. Functions

13. Decision Structures

14. Loops

15. Simulation Design

16. Objects and Classes

17. Algorithm Design, Sorting, Searching, and Recursion

# Assignments

Weekly Assignments will normally include:

* Lecture Notes
* PowerPoint presentations
* Class discussions
  + Discussion Posts
  + Discussion Replies
* Textbook reading assignment
* Online pretests
* Guided programming project
* Lab Assignments: beginning, intermediate, and challenge
* Quizzes
* Tests

# Discussion Forum

Students are expected to make frequent visits to the class forum for sharing ideas with your classmates and requesting assistance with problems you have encountered or concepts that are not easily understood.  The FORUM is your classroom for this semester.  You should plan on visiting the forum at least four times each week to state questions and to respond to issues that have been submitted by your classmates.

Points will be awarded for Forum participation.

# Quizzes

All quizzes and tests are open book so you can look up the answers - however, they are also timed so you need to be familiar with the material, able to answer many of the questions without opening the book, and able to find the material in the chapter quickly.

It is advisable that you complete the review quizzes before the chapter quizzes, midterm or final.

# Time Requirements to be Successful in this Course

Online courses involve different methods of learning, and flexible weekly participation; however, they do not require any less time.

This is a three unit course so you will be expected to spend 5- 10 weekly hours on readings, assignments, discussion, and quizzes.

It’s best to check canvas every day, an announcement may not get forwarded, and it’s best to check your grades often, so you know exactly where your grade is at all times.

It is recommended that you work ahead in this class, this will allow you more time to debug and test your programs.

You may not work ahead on the discussions and replies. This keeps if fair, as everyone gets the same chance to choose a topic. Don't start replying to posts until after Thursday so you can read all the posts. Reply by Sunday night of each week.

Post 10 points.

Replies 5 points each.

Discussion and reply points will be combined in your "Grades" and will be posted after the replies are due.

All other assignments are due Sunday night.

Schedule your time appropriately, so you may complete all your assignments on time.

# Grading of your assignments

I will try to grade your discussion, replies, and assignments, promptly.

I will not grade the discussions until after the replies are due, because Canvas will only give one grade for both the discussion and reply, and it distresses some students to see a partial grade for an assignment.

All other assignments are due Sunday and I will do my best to have these graded promptly.

# Student Code of Conduct

Students’ participation in this course will be expected to adhere to the Student Code of Conduct as published in the current college catalog.  Willful misconduct "shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student.

# Academic Integrity

People are overwhelmingly honest, hard-working, and eager to learn. I know this to be true and it is my starting place for dealing with students. However, I must formally advise you of my policy on cheating. I’d rather not even mention it, but I must, so here it is.

This course is designed to evaluate your individual abilities to perform the tasks assigned, and therefore it is essential that you do your own work in this class and not share your solutions with others.  The design and execution of every project that your turn in must be performed entirely by you and you alone.  If I determine that two or more of you shared your ideas or solutions, or that you plagiarized your work from another source, I will be required to take disciplinary actions in accordance with the Student Code of Conduct.

Plagiarism is taking credit for the work of someone else. This is cheating. I will know it and I will take action in accordance with the COD student code of conduct.

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| Students With Disabilities Statement: Students with disabilities, whether physical, learning or psychological, who believe that they may need accommodations in this class, are encouraged to contact Disabled Students Programs and Services as soon as possible to ensure that such Accommodations are implemented in a timely fashion. |
| Equal Opportunity Statement: College of the Desert is committed to Equal Employment Opportunity for all persons and to provide educational and employment opportunities free from discrimination on the basis of ethnic group identification, national origin, religion, age, veteran status, sex, race, color, ancestry, sexual orientation, or physical or mental disabilities, and other physical or verbal conduct or communication constituting sexual harassment.) |

# Important Calendar Dates:

August 26 Fall Classes begin

September 5 Holiday - Labor Day - CAMPUS CLOSED

August 26 - Sept 6 Late registration completed via Self Service

September 6 Last day to park in student lots without a Parking Permit

September 6 Last day to ADD full-term classes

\*For late start courses go to Self Service, enter any start date after September 6

September 6 Last day to drop full-term classes and qualify for refunds.

Students enrolled beyond this date are financially responsible for their fees.

September 11 Last day to drop classes without a grade of “W.”

September 12 Census for full term classes that started on August 26th

October 14 Last day to submit Fall 2022 Application to Graduate

November 11 Holiday - Veterans Day - CAMPUS CLOSED

November 18 Last day to drop with a grade of "W."

November 24 - 25 Holiday - Thanksgiving - CAMPUS CLOSED. No Saturday Classes

December 10 - 16 Final Exams

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| SESSION | Week of: | ASSIGNMENT |
| 1 | 8/26/22 | Class introduction and Intro to Computers Overview  Syllabus test  Test: Intro to Computers Overview  An Introduction to programming |
| 2 | 9/5/22 | Logic and Flowcharting / Test: Intro to Computers Overview / Binary Math Test  An Introduction to programming Logic  An Introduction to programming |
| 3 | 9/12/22 | Chapter 1: An Introduction to Python and Computers |
| 4 | 9/19/22 | Chapter 2: Data Types and Expressions  Program development |
| 5 | 9/26/22 | Chapter 3: Control Statements  Program development |
| 6 | 10/3/22 | Chapter 4: Strings and Text Files  Program development |
| 7 | 10/10/22 | Chapter 5: Lists and Dictionaries  Program development |
| 8 | 10/17/22 | Review for Midterm Project  Program development  Midterm Project Presentations  Midterm Project due chapters 1-5  Midterm Exam Chapters 1-5 |
| 9 | 10/24/22 | Chapter 6: Design with Functions  Program development |
| 10 | 10/31/22 | Chapter 7: Simple Graphics and Image Processing  Program development |
| 11 | 11/7/22 | Chapter 8: Graphical User Interfaces  Program development |
| 12 | 11/14/22 | Chapter 9: Design with Classes  Program development |
| 13 | 11/21/22 | Chapter 10: Network Applications and Client/Server Programming  Program development |
| 14 | 11/28/22 | Chapter 11: Searching, Sorting, and Complexity  Program development |
| 15 | 12/5/22 | Final Exam  Program development with Documentation |
| 16 | 12/12/22 | Final program testing  Final Project Due 12/16/22 |

**NOTE:** **THIS SYLLABUS IS SUBJECT TO CHANGE WITHOUT NOTICE**