**Prerequisites:**

Programming Fundamentals or equivalent experience, and experience with an object oriented language such as C++, Java, or C# recommended

**Textbook:** *Fundamentals of Python: First Programs*

Author:Kenneth Lambert

Publisher: Course Technology, Cengage Learning, 2012

ISBN-13: 978-1-111-82270-5

**Course Objectives**

Python is a powerful scripting language that can be used to automate system administration, create powerful web pages, develop mobile applications, and more. This course is a hands-on introduction to Python. The course introduces many beginner programming concepts along the way. Students will problem solve and explore real-world software development challenges.

**Specific topic coverage includes**:

* Algorithms and Information Processing
* Control Structures
* Boolean logic and Numeric Data Types
* Strings, Text Files, Lists, and dictionaries
* Procedural Abstraction in Function Definitions

**6-Session (18 hours) Course Outline**

|  |  |  |
| --- | --- | --- |
| **Session** | **Topics** | **Chapter**  **Readings** |
| **1** | Introduction  Software Development, Data Types, and Expressions | Chapter 1  Chapter 2 |
| **2** | Control Statements | Chapter 3 |
| **3** | Strings and Text Files | Chapter 4 |
| **4** | Lists and Dictionaries | Chapter 5 |
| **5** | Design with Functions | Chapter 6 |
| **6** | Design with Classes | Chapter 8 |

## Inclement Weather

*In case of inclement weather, please check the Montgomery College web site:*

[***http://cms.montgomerycollege.edu/edu****/*](http://cms.montgomerycollege.edu/edu/)

*Or call* ***240-567-5000*** *for class delays, cancellations or closures.*

## Reminders

* Only those students who attend 80% of the course will be issued a certificate.
* Certificates are e-mailed to the students upon successful course completion.
* Grades are not issued for these non-credit classes. The students attendance will be marked as “complete” or “not complete” in their official class records.
* Bring a USB flash drive to class in case you wish to save your work. You may also use dropbox, Google drive or any other method you can dream up.

## Evaluation

Please complete an evaluation on the last class at <http://www.montgomerycollege.edu/iti/>

After you get to the site click on Continuing Education and select the Course Evaluation item from the menu.

## Instructor

Dave Wolf, PMP

[david.wolf@montgomerycollege.edu](mailto:david.wolf@montgomerycollege.edu)

<http://www.linkedin.com/in/djwolf/>

Project Manager, Consultant, Trainer at Sterling Business Advantage, LLC

Dave Wolf, PMP has over twenty years’ experience leading all aspects of the systems development life cycle as a project manager, consultant, developer, analyst, and trainer. He has demonstrated initiative, technical proficiency and creative problem solving. Dave is the principal behind Sterling Business Advantage, LLC. The vision of Sterling Business Advantage, LLC is to take our many years of experience, knowledge and expertise and help project managers and small business owners leverage their time using software to automate repetitive business processes. We also help professionals to become more adept at using the software that so many come to rely on in their work.

## Services for Students with Disabilities

Montgomery College complies with the provisions of the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. The College seeks to provide reasonable accommodations to qualified students with disabilities to give students an equal educational opportunity to participate in College programs, activities, and services. Individual students are given appropriate accommodations based on specific information and assessment data documented by a qualified professional(s).

## Disability Support Services

If you need support services due to a disability, please follow these steps:

1. Register for class.
2. Contact WD&CE Disability Support Services Counselor, Natalie Martinez, natalie.martinez@montgomerycollege.edu or 240-567-4118, at least four weeks prior to the start of the class to arrange for accommodations and/or assistive technology.

If this procedure is not followed, services may be delayed.

# How can you learn more?

I’ve been a developer over twenty years. These recommendations come from my experience and from the experience of many excellent co-workers. Your success is completely dependent on your ability to learn.

The secret to learning is *practice*. Start small and work your way up. Find examples on the internet and reverse engineer them or copy them. Just write programs to help you do your job. Create a database of your favorite restaurants or to track your phone number and email list. You will not become a programmer or database administrator by attending this course. But this course is a great first step. The book selected for this course is an excellent resource that my department used professionally as a reference by actual programmers and database administrators Hang on to it after class.

## Are you really thinking of becoming a professional programmer?

Buy this book and read it. More than once.

The Passionate Programmer (2nd edition): Creating a Remarkable Career in Software Development

by Chad Fowler

This book is about creating a remarkable career in software development. In most cases, remarkable careers don’t come by chance. They require thought, intention, action, and a willingness to change course when you’ve made mistakes. Most of us have been stumbling around letting our careers take us where they may. It’s time to take control. This revised and updated second edition lays out a strategy for planning and creating a radically successful life in software development.