EM 624: Informatics for Engineering Management Course Syllabus

Course Instructor:

Dr. Carlo Lipizzi clipizzi@stevens.edu Babbio 507

Course Time:

Wednesday starting at 6:30pm

Required Course Materials (there is a link to .pdf version for both texts on Canvas)

- McKinney, Wes (2012), Python for Data Analysis, O'Reilly, 978-1-449-31979-3
- Severance, Charles [Dr. Chuck] (2011), Python for Informatics, available free in .pdf format under Creative Commons license

Software for the course

- Python 3.6.n or 3.7.n [required]
- PyCharm https://www.jetbrains.com/pycharm/download/ (FREE or academic version)
 [you may use some any other python IDE or plain text editor + terminal]

Attendance and Participation

You are expected to attend every class and be on time. You must bring your computer to class.

Participation will be graded based on time spent on Canvas, live class attendance, videos watching, discussions participation.

Canvas

The class Canvas site contains information on assignments and due dates, as well as other course information. Relevant chapters of the texts are noted on the Canvas site. You are responsible for checking the site regularly for announcements, and for completing assignments according to the instructions and schedule on the site. Unless otherwise indicated, all assignments are to be submitted via Canvas. It is your responsibility to check that your assignment has been successfully uploaded to Canvas. Computer, Internet, or Canvas problems will NOT be accepted as an excuse for a late or missing assignment.

Discussion Board

There is an EM624 Discussion forum that will be used for non-private communication regarding the course. This will include course announcements and tips for the assignments, among other things. Please subscribe to this discussion so that you will receive notice of new postings. Students are encouraged to post general questions and comments to this forum. Answers to student questions will be posted on the forum. These postings may contain information vital to success in completing the assignments, so please stay current in reading the postings. Any conversation of a private nature between student and professor should be via email.

Grading

Late assignments/programs/project lose 20% after due date/time, 50% after 24 hours, receive a zero after 48 hours. Once an assignment grade is posted, you will have one week to question your grade. After that, the grade becomes final and unchangeable.

Programming Guidelines and Ethical Behavior:

Program header must include Author name(s) and assignment information (use comments). Comments must also be used at the beginning of the program to give an overall description of the purpose of the program. Comments should also be used throughout the code to explain what it is doing. It should be possible to re-create your program based on the comments alone. Poorly commented programs will receive poor grades.

Programs should employ good programming practices as presented in class. Examples are the use of descriptive variable, comments and function names.

All the graded assignments will be individual.

Cheating of any kind – including "code sharing" between students - will result in a zero grade for the assignment and could also be subject to other Stevens academic penalties.

All code must be your original creation. <u>Any non-original code must be clearly marked as such</u> (use comments). Programs are subject to screening by plagiarism detection software. <u>Plagiarism is considered cheating and will result in a zero grade</u>.

Students may use online resources, such as StackOverflow. <u>If students use parts of code from those online sites</u>, the exact link to the page with the source that has been used must be added to the code as comment.

If part of all the code in an assignment is not original and not from a cited source, the case will be considered as "cheating"/plagiarism.

Course content

Please check the file "EM624_Schedule.xlsx" for class dates and course content distribution.

<u>Grade breakdown:</u> (values rounded)

Homework Assignments 54%
Midterm 17%
Final Project 26%
Participation 3%

Please check the file "EM624 GradesDistribution.xlsx" for final grade calculation.

Course Outcomes:

- 5.1 Design Assessment Design and carry out an analysis of data files.
- 6.1 Tools Use Python and tools in the Python libraries to manipulate and analyze data.
- 12.1 Contemporary Issues Analyze a variety of types of information used in today's business environment.
- 12.2 Contemporary Issues Describe the role of software development in today's business environment