

12. Документи за учебната работа на Александър Илиев

11.1. Справки за четени лекции/упражнения

ПРЕПОДАВАТЕЛСКИ ОПИТ

Lecturer, UC Berkeley Extension

- Introduction to Matlab (EL-ENG-X446.7), Sep.2012, June.2014, March.2015
- Python for Data Analysis and Scientific Programming (EL-ENG-X446.7), 2015 - current

Lecturer, College of Engineering, University of Miami, 2006

- Architectural Acoustics (CAE380)

Lecturer, School of Communication, University of Miami, 2002 – 2005

- Advanced Audio Production for Film and Video (CMP594)
- Advised, coordinated, and supervised as member of the thesis committee

ЧЛЕНСТВО В КОМИСИИ

- Thesis Committee member at the School of Communication, University of Miami

11.2. Списък на издадени учебници и учебни помагала – на хартия и/или електронни

МОНОГРАФИЯ

- Iliev, A.I., "Emotion Recognition From Speech", Monograph, Lambert Academic Publishing, 2012

Introduction to MATLAB and SCILAB

X446.7 • 1 semester unit in EECS

Powerful platforms for high-performance mathematical computation and graphical representation provide immense benefits with their ability to handle immense amounts of data in a flexible manner. Capabilities for rapid model design, development, the ability to manipulate “what-if” stimuli and statistical analysis have made these platforms popular worldwide. Gain an intermediate skill level to write scripts, perform calculations, use the command line, import data from files, plot data, integrate with C++ or Java and build GUIs.

EDP 158345

Alexander I. Iliev, Ph.D.

5 meetings

Wednesdays and Mondays, 6–9 pm

Sept. 5–19

SAS, SPSS, Quantitative Analysis and Analytics

COURSE INFORMATION

(510) 642-4151
extension-techeng@berkeley.edu
extension.berkeley.edu/technology

Introduction to MATLAB and SCILAB

EL ENG X446.7 • 1 semester unit in
Electrical Engineering

*A requirement in the Professional Program in
Quantitative Analysis*

Powerful platforms for high-performance mathematical computation and graphical representation provide immense benefits with their ability to handle immense amounts of data in a flexible manner. Capabilities for rapid model design, development, the ability to manipulate what-if stimuli and statistical analysis have made these platforms popular worldwide. Gain an intermediate skill level to write scripts, perform calculations, use the command line, import data from files, plot data, integrate with C++ or Java, and build GUIs.

Sec. 002

Alexander Iliev, M.S., Ph.D.

5 meetings

Mondays and Wednesdays, 6:30–9:30 pm

June 2–16

Март.2015 – описание на лекциите обявени на сайта на UC Berkeley

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Course Catalog

INTRODUCTION TO MATLAB AND SCILAB

EL ENG X446.7

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COURSE DESCRIPTION

Powerful platforms for high-performance mathematical computation and graphical representation provide immense benefits with their ability to handle large amounts of data in a flexible manner. Capabilities for rapid model design, development, ability to manipulate what-if stimuli and statistical analysis have made these platforms popular worldwide. Gain an intermediate skill level to write scripts, perform calculations, use the command line, import data from files, plot data, integrate with C++ or Java, and build GUIs.

APPLIES TOWARD THE FOLLOWING CERTIFICATE(S) AND PROGRAM(S)

[Professional Program in Quantitative Analysis](#)

SECTIONS

EL ENG X446.7 - 001 Introduction to MATLAB and SCILAB

REQUEST INFORMATION

Date/Time:	Mon, Wed 6:30PM - 9:30PM 2 Mar 2015 to 16 Mar 2015	2014-2015 - Spring 2015 Instructors: Alexander Iliev
Building:	San Francisco Campus	
Room:	Classroom 514	
Location:	San Francisco	

Delivery Options: Classroom

Number of Meetings: 5

Instructional Hours: 15.0

Available for Credit: 1 semester units

Courses of Related Interest

- New!** [Finance for Nonfinancial Technical Managers](#)
- New!** [Innovation for Entrepreneurs/Intrapreneurs](#)
- New!** [Leadership and Technology Management](#)
- [Managing Sustainable Change in an Organization](#)

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INTRODUCTION TO MATLAB AND SCILAB
EL ENG X446.7

- ### COURSE DESCRIPTION

APPLIES TOWARD THE FOLLOWING CERTIFICATE(S) AND PROGRAM(S)

Professional Program in Data Analysis

SECTIONS

EL ENG X446.7 - 003 Introduction to MATLAB and SCILAB

[ADD TO CART](#)

Date/Time:	Mon, Wed 6:30PM - 9:30PM 5 Oct 2015 to 19 Oct 2015
Building:	San Francisco Campus
Room:	Classroom 515
Location:	San Francisco

2015-2016 - Fall 2015

Instructors: Alexander Iliev

Delivery Options: Classroom

Number of Meetings: 5

Instructional Hours: 15.0





Available for Credit: 1 semester units

Mark your calendar. On Aug. 1 and 2, and Sept. 5, 6 and 7, there will be no BART train service between San Francisco and the East Bay. Please plan on alternate routes or public transportation to get to your class on those days. [Learn more about the BART closure.](#)

- [Sustainable Construction Management and Field Practices](#)
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Course Catalog

PYTHON FOR DATA ANALYSIS AND SCIENTIFIC COMPUTING

COMPSCI X433.3

- [Sections available for enrollment](#)
- [Email this course information](#)
- [Request information about this course and future sections](#)

COURSE DESCRIPTION

Discover the flexibility of the powerful packages NumPy, Scipy and Matplotlib when dealing with heavy mathematical, engineering or scientific problems. Explore the wonderfully concise and expressive use of Python's advanced module features and apply it in probability, statistical testing, signal processing, financial forecasting and various other applications. You study mathematical operations with array data structures, optimization, Probability Density Function, interpolation, Fast Fourier Transform, basic signal processing and other high-performance benefits. In class, you discuss a number of interesting engineering problems to motivate your use of Python's advanced features. This advanced-level course—aimed at engineers, scientists and software engineers who would like to become Python power users can help you harness the power of Python to solve everyday scientific and engineering problems.

NOTES

You must have a background in Python or Matlab, calculus or programming; C, C++, or Java is strongly recommended. You must have personal access to Python's programming environment to be able to complete your homework assignments.

APPLIES TOWARD THE FOLLOWING CERTIFICATE(S) AND PROGRAM(S)

[Professional Program in Data Analysis](#)

SECTIONS

COMPSCI X433.3 - 001 Python for Data Analysis and Scientific Computing		ADD TO CART
Date/Time:	Mon, Wed 6:30PM - 9:30PM 21 Oct 2015 to 25 Nov 2015	2015-2016 - Fall 2015
Building:	San Francisco Campus	Instructors: Alexander Iliev
Room:	Classroom 605	
Location:	San Francisco	
Delivery Options: Classroom		
Number of Meetings: 10		
Instructional Hours: 30.0		
Available for Credit: 2 semester units		


Heads-Up: Upcoming BART Closure

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Courses of Related Interest

- [Sustainable Construction Management and Field Practices](#)
- New!** [Introduction to Data Sciences and Analytics](#)
- [Introduction to Facilities Management](#)
- New!** [Practical Machine Learning \(With R\)](#)

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PYTHON FOR DATA ANALYSIS AND SCIENTIFIC COMPUTING

COMPSCI X433.3

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NOTES

You must have a background in Python or Matlab, calculus or programming; C, C++, or Java is strongly recommended. You must have personal access to Python's programming environment to be able to complete your homework assignments.

APPLIES TOWARD THE FOLLOWING CERTIFICATE(S) AND PROGRAM(S)

[Advanced Program In Software Development](#)

[Professional Program in Data Analysis](#)

SECTIONS

COMPSCI X433.3 - 002 Python for Data Analysis and Scientific Computing		ADD TO CART
Date/Time: Mon, Wed 6:30PM - 9:30PM 4 Apr 2016 to 4 May 2016	2015-2016 - Spring 2016	
Building: Wheeler Hall	Instructors: Alexander Iliev	
Room: Classroom 130		
Location: Berkeley Campus		
Delivery Options: Classroom		
Number of Meetings: 10		
Instructional Hours: 30.0		
Available for Credit: 2 semester units		

Print Catalog

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Calendar of Events

[Program in Professional Communication](#)
[Online Information Session](#)
 Friday, Apr. 8

[Certificate Program in HVAC Online](#)
[Information Session](#)
 Tuesday, Apr. 12

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COMPSCI X433.3 - Python for Data Analysis and Scientific Computing

Course Description

Discover the power and flexibility of NumPy, Scipy and Matplotlib when dealing with heavy mathematical, engineering or scientific problems. Explore the concise and expressive use of Python's advanced module features and apply them in probability, statistical testing, signal processing, financial forecasting and other applications. You study mathematical operations with array data structures, optimization, Probability Density Function, interpolation, fast Fourier transform, basic signal processing and other high-performance benefits.

Course Outline

Course Objectives

- Solve more complex engineering, financial, mathematical and scientific problems.
- Develop complex functions and scripts to perform complicated calculations and to visualize the results of these calculations.
- Attain deeper understanding of the mathematical toolkit provided by the powerful core packages in this course.
- Acquire in-depth hands-on experience.

What You Learn

- Numpy
- Scipy
- Matplotlib
- Operations with arrays and scalars
- Indexing, slicing
- Reductions
- Broadcasting
- Shape manipulation of arrays
- Data sorting
- Advanced data types
- Type casting
- Dealing with polynomials
- Text and media files
- Random numbers
- Linear algebra operations
- Input/Output
- Fast Fourier transforms
- Histograms
- Probability density function
- Interpolation
- Signal processing

COMPSCI X433.3 - 004

Spring 2017

Classroom

Available

Add to Cart

Type: Lecture

Days: M, W

Time: 6:30PM to 9:30PM

Dates: Apr 17, 2017 to May 17, 2017

Location: Berkeley

Building: UC Berkeley Extension Golden Bear Center

Room: Classroom 204

Schedule and Location: [View Details](#)

Instructional Hours: 30.0

Location: Berkeley

Delivery Options: Classroom

Course Fee(s): Course Fee credit (2 units)

Available for Credit: 2 semester units

Instructors: [Alexander Iliev](#)

Section Notes:

This course meets on Mondays and Wednesdays each week.