# Lecture 00

## Course Introduction

# Geospatial Development with Python

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# Outline

- Introduction

- What should you expect to learn?

- What I expect from you?

- Major topics to be covered

- Lab exercises

- Evaluation and marks distribution

- Books and other reading material

- Survey – what you know already

# **Introduction**

- GIS
  - Programming
  - Scripting
  - Automation
  - Customization
  - **Development**

# Introduction

- GIS
    - Programming
    - Scripting
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# What should you expect?

- Programming with Python

- GIS programing with Python

  - Write programs

  - Develop applications

- Lab exercises, tasks

- Home assignments

- Frequent quizzes - always surprising

# What are my expectations?

- Strong GIS concepts
- Know at least one programming language
- Participate actively in the class
- Submit deliverables always on time – DEADLINES
- Lab participation
- MS thesis ???

**CAUTION** !!! Plagiarism is dealt strictly

# Major Topics – In Class

- Part -I
  - Python -very brief

- Part- II
  - Development

- Part – III (Tentative)
  - Case studies

Geospatial Development with Python

# Lab Work

- >>> Python

  - Vector data handling and processing

  - Raster data handling and processing

  - Data Visualization

# Marks Distribution - Tentative

|  | No. | % |
| --- | --- | --- |
| **Quiz** | 01/week | 10 |
| **Assignment** | 01/week | 15 |
| **OHT** | 1-3 | 20 |
| **Final Exam** | 1 | 25 |
| **Project** | 1 | 30 |
|  |  | **100** |

# IST Grading Policy

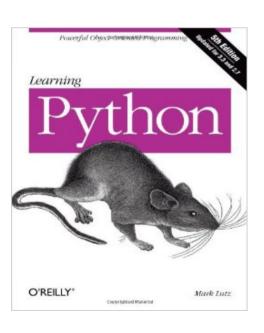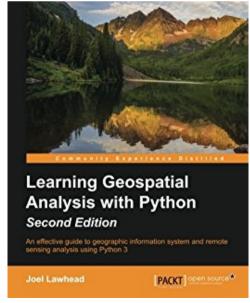| Highest | Lowest | Letter |
| --- | --- | --- |
| 100.00 % | 85.00 % | A |
| 84.99 % | 81.00 % | A- |
| 80.99 % | 77.00 % | B+ |
| 76.99 % | 73.00 % | B |
| 72.99 % | 69.00 % | B- |
| 68.99 % | 65.00 % | C+ |
| 64.99 % | 61.00 % | C |
| 60.99 % | 0.00 % | F |

# Course Website

http://grel.ist.edu.pk/lms/course/view.php?id=69

Enrollment key: 5352017

Geospatial Development with Python

# Books