

# A BEGINNER'S COURSE TO USING PYTHON IN CLIMATE AND METEOROLOGY

21-22 JANUARY 2012

ERNEST N. MORIAL CONVENTION CENTER

NEW ORLEANS, LA

## ORGANIZER & INSTRUCTOR

Johnny Lin, North Park University, Chicago, IL

## PROGRAM (Room 238)

### SAT 21 JANUARY

8:30 A.M.	ARRIVAL AND INTRODUCTIONS
8:45 A.M.	PROGRAMMING ENVIRONMENT SETUP AND TROUBLESHOOTING
9:00 A.M.	INTRODUCTION TO PYTHON: WHAT IS AND WHY PYTHON?
9:30 A.M.	USING THE PYTHON INTERPRETER AND INTERACTIVE DEVELOPMENT ENVIRONMENT (IDE)
10:00 A.M.	COFFEE BREAK
10:30 A.M.	BASIC DATA AND CONTROL STRUCTURES
12:00 P.M.	LUNCH BREAK
1:30 P.M.	ARRAY OPERATIONS
3:00 P.M.	COFFEE BREAK
3:30 P.M.	FILE INPUT AND OUTPUT
5:00 P.M.	ASSIGN OPTIONAL HOMEWORK: PUTTING TOGETHER A BASIC DATA ANALYSIS ROUTINE
5:15 P.M.	COURSE ADJOURNS FOR THE DAY

### SUN 22 JANUARY

8:30 A.M.	ARRIVAL
8:45 A.M.	DISCUSSION OF OPTIONAL HOMEWORK: PUTTING TOGETHER A BASIC DATA ANALYSIS ROUTINE
9:45 A.M.	AN INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING USING PYTHON: PART I: Basic Principles and Syntax
11:00 A.M.	LUNCH BREAK. (Note different time than Sat.)
12:30 P.M.	AN INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING USING PYTHON: PART I: Basic Principles and Syntax
2:00 P.M.	COFFEE BREAK
2:30 P.M.	AN INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING USING PYTHON: PART II: Application to Atmospheric Sciences Problems
3:30 P.M.	VISUALIZATION: BASIC LINE AND CONTOUR PLOTS
5:00 P.M.	SHORT COURSE ADJOURNS