



# Programming Fundamentals

(CS 1002)

Dr. Muhammad Aleem,

Department of Computer Science,  
National University of Computer & Emerging Sciences,  
Islamabad Campus



# 1. Contact Information

---

## About me:

- Muhammad Aleem
  - **Ph.D.** from University of Innsbruck, Austria (2012),
  - **Specialization:** *Parallel and Distributed Computing*

## Contact Information:

- Office: 202C (2<sup>nd</sup> Floor, Block C)
- Phone Ext: 629
- Email: [m.aleem@nu.edu.pk](mailto:m.aleem@nu.edu.pk)
- Co-Director: [Parallel Computing and Networks](#) research group



## 2. Course Consultation

---

**Consultation Hours:**



### 3. Class Policies and Guidelines

- **Attendance policy** : marking at the **start of the lecture**
- **Plagiarism policy**: as per outline



- Use of cell phones
- Discussion with fellows during class (unless needed for some announced task)
- Early leave (will result in absent)
- Frequent movement In-out during class



- **Be interactive, ask questions**
- **Participate in the lecture**
- **Relax and learn 😊**



## 4. Course Coordination

---

- Lecture slides and other material will be shared on **Google classroom**
- The class code is: **kts6kea**
- URL:  
<https://classroom.google.com/u/0/c/NTI2NTQ5MTM4Nzk5>



# What is this Course About ?

- Its about **knowing computers**
- **Programming** them.
- **Assumptions:** *no prior knowledge of programming*





## 5. Detailed Course Contents (1/2)

---



## 5. Detailed Course Contents (2/2)

---





## 6. Grading Policy

---

Grading policy: **Absolute grading**



## 7. Retake Policy

---

- Retake of missed assessment items (other than midterm/ final exam) will not be held (**no retake of assignment/quiz/project**).
  - **Late submission (See Outline)**
- For a missed midterm/ final exam, an exam retake/ pretake application along with necessary evidence are required to be submitted to the department secretary. The examination assessment and retake committee decides the exam retake/ pretake cases.



## 8. Plagiarism Policy

---

- Plagiarism in **project** may result in **F grade in the course**.
- Plagiarism in an **assignment/quizzes** will result in zero marks in the **whole assignments/quizzes category**.



## 9. Course Learning Outcomes (CLOs)

---

After completion of the course, the students shall be able to:

1. **Understand** basic **problem-solving steps** and **logic constructs**.
2. **Apply** basic **programming concepts**.
3. **Design** and **implement** algorithms to **solve real-world problems**.



## 10. Course Aims/Objectives

---

- To **equip students** with the **basic computing concepts**
- To provide them the ability to **analyze** the given **requirements** for **solving problems** in different domain
- To **train students** for **implementing the solutions** (C++ programming language) on a **computer system**.

I  programming



# 11. Text & Reference Books

---

- **Text Book:**

Tony Gaddis "STARTING OUT WITH C++" 9th Edition

- **Reference Books:**

- Paul Deitel, Harvey Deitel "C++ How to Program" 10th Edition
- Walter Savitch "Problem Solving with C++" 10th Edition
- D. S. Malik, "C++ Programming: From Problem Analysis to Program Design" 6th Edition

- **Lecture Material (Acknowledgements)**

Lecture material is based on several books and internet sources.



**Any Questions ?**