**CIS 200 – 001 Jan 13, 2021**

1. **Syllabus**

**CIS 200, The second foundation class in computer science**

**What we will learn:**

1. **Unix**
2. **C++**
3. **Data Structures in computer science**
4. **Algorithms (esp. sorting, binary search, linear search)**

**Importance:**

1. **21st century is information age**
2. **Data Science for M.Sc. degree**

**Syllabus:**

**Grading:**

**Effort-based course –**

**Intelligence-base course—**

**Memorizer vs thinker**

**Best way to study programming:**

**Practice, practice and practice**

1. **Unix: an operating system**

**Your laptop ------------------- SSH ---------🡪 UM-D server**

1. **SSH**

**+ Secure Shell Client: help you log into the Unix server**

**+ Secure File Transfer: help you transfer files between your laptop and unix server**

1. **Putty: it is equivalent to Secure Shell Client**
2. **WinSCP: it is equivalent to Secure File Transfer**

**Interpreter: you don’t need to convert the source code to machine code. You run it directly.**

**Compiler: convert the source code to machine code first and then run it**

**Man: manual**

**File Organization:**

**One-dimensional approach: list**

**Two-dimensional approach: tree**

**Absolute Path: /home/hls/bin/log**

**Relative Path: ./bin/log**

**“.” means the current working directory**

**$pwd 🡪 give the current working directory**