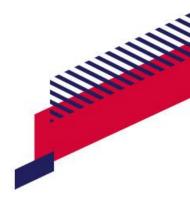




# EE2008/IM2008 Data Structures and Algorithms

Week01\_Briefing





#### **Assessments**

#### Course grades will be determined based on

- 5 Individual Readiness Assessments (IRAs) 10%\*\*
- 2 Homework Assignments 10%
- 2 Lab Sessions 10%
- 1 Quiz 10%\*\*
- Final exam 60%

<sup>\*\*</sup>Due to the Cov-19 situation, the IRA-schedule may need to update from time to time. In case IRAs are partially canceled, the weightage of the quiz will be adjusted accordingly. You will be informed when necessary revisions are required.

## Individual Readiness Assessment (IRA)

- Refer to the IRAs & Quiz Schedule on next page.
- To test if you have understood basic concepts of recent 2 weeks of LAMS video lectures. For example, IRA #2 conducted in week #4 is related to Weeks 3 and 4 LAMS video lectures.

#### Format:

- At the beginning of the tutorial class with a duration of 15 min
- Closed-book assessment
- MCQ/short questions on basic concepts
- Count the top 4 scores out of 5 IRAs.
- No make-ups or retakes are allowed.

#### IRAs & Quiz Schedule (AY2021-22 Sem 2)

| Wk# | Group A                    | Group B                     | Remarks                                 |
|-----|----------------------------|-----------------------------|---|
| 1   | Zoom/Teams                 | Zoom/Teams                  | Online tutorial                         |
| 2   | IRA #A1                    | Zoom/Teams                  | Hybrid                                  |
| 3   | Zoom/Teams                 | IRA #B1                     | Hybrid                                  |
| 4   | IRA #A2                    | Zoom/Teams                  | Hybrid                                  |
| 5   | Zoom/Teams                 | IRA #B2                     | Hybrid                                  |
| 6   | IRA #A3                    | Zoom/Teams                  | Hybrid                                  |
| 7   | Quiz (first 40 min) at TR+ | Quiz (second 40 min) at TR+ | Tutorial no. 7 will be conducted online |
| 8   | Zoom/Teams                 | IRA #B3                     | Hybrid                                  |
| 9   | IRA #A4                    | Zoom/Teams                  | Hybrid                                  |
| 10  | Zoom/Teams                 | IRA #B4                     | Hybrid                                  |
| 11  | IRA #A5                    | Zoom/Teams                  | Hybrid                                  |
| 12  | Zoom/Teams                 | IRA #B5                     | Hybrid                                  |
| 13  | Zoom/Teams                 | Zoom/Teams                  | Online tutorial                         |

## Grouping

- Tutorial students are divided into 2 groups: Group A and Group B.
   The School of EEE will arrange the grouping.
- For administrative convenience, it is important for each course student to attend the registered tutorial classes.
- IRAs will only be conducted for tutorial students attending the tutorial classes. After the IRA, the tutorial session will proceed with problem solving of tutorial questions.

## **Homework Assignments**

- 1<sup>st</sup> Homework Assignment
  - ➤ Given out in Week 4 by your tutorial instructor during tutorial classes.
  - ➤ Hand in to your tutorial instructor for grading in Week 5. Details will be given by your tutorial instructor.
- 2<sup>nd</sup> Homework Assignment
  - ➤ Given out in Week 11 by your tutorial instructor during tutorial classes
  - ➤ Hand in to your tutorial instructor for grading in Week 12. Details will be given by your tutorial instructor.

## Late Policy for Homework Assignments

- Late submissions of homework assignments will be penalized 10% per day
- The penalty begins at the starting of the tutorial class on due day
- The penalties will continue for 3 full days. Subsequent submissions will not be graded.

## **Plagiarism Policy**

- The actual write-up must be done entirely by yourself.
- You cannot directly copy or slightly change other students' solutions for your submission.
- If you cheat on an assignment, both you and the person who helped you will receive a lower grade or grade F.

### Quiz

- Quiz will be held during the tutorial class in Week 7.
- Instructors will take attendance during the quiz. Please bring along your student ID.
- Students without any ID (with photo) are to sign against their names in attendance list. Need to show ID to instructor later before marks can be accepted.
- Absentees should contact instructors within one week of the quiz.
- Absentees with valid reasons or MCs can request to take a separate quiz within 2 weeks of the quiz. Tutorial instructors will decide if the requests can be acceded.
- If absentees do not contact the instructor, zero marks will be awarded.

## **Covered Topics in This Course**

- Introduction
- Principles of Algorithm Analysis
- Data Structures
- Sorting
- Searching, Graph Search
- Algorithm Design Techniques

The covered topics for each teaching week can be found in the file *Weekly Study Guide*.

### **Books**

#### **Textbooks:**

- Anany Levitin, Introduction to The Design and Analysis of Algorithms, 3<sup>rd</sup> Ed., Pearson Education, 2012
- Thomas H Cormen, Charles E Leiserson, Ronald L Rivest, and Clifford Stein, Introduction to Algorithms, 3<sup>rd</sup> Ed, The MIT Press, 2009 (QA76.6 I5858)

#### **References:**

- GB Huang and JM Ng (eds), Data Structures and Algorithms, Pearson Education, 2007
- Richard Johnsonbaugh and Marcus Schaefer, Algorithms, Prentice Hall, 2004. ISBN 0131228536