Title (Units): **COMP1006 Facets of Computing (1,1,0.5)**

Course Aims: To provide students with an overview of core areas in computing, an appreciation of their potentials and limitations, and a glimpse of the IT profession and their career paths.

Prerequisite: Nil

Course Intended Learning Outcomes (CILOs):
Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Explain key concepts under core areas of computing
2	Explain how computing technologies can be applied in different domains
3	Relate some basic industrial practices, IT law, IT professionalism and career paths to their own area of study
	Professional Skill
4	Communicate effectively on technical topics in written formats
5	Work as a team for a series of technical reports

Calendar Description: This course provides students with an overview of core areas in computing, an appreciation of their potentials and limitations, and a glimpse of the IT professionalism, and their career paths.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-5	Technical reports and presentations of key concepts of computing, followed by discussion and lectures for concept clarifications.
3	Company visits and meetings with alumnus.
4	Lectures, report writing skills

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Technical Report Writing	30%	1, 2, 3, 4	Students are required to write reports on each topic presented, select one topic to expand it to a term paper.
2	Technical Presentation	30%	1, 2, 4	Students are required to present the term paper and group work.
3	Reflection Report	10%	3, 4	Students are required to meet with alumnus and write a reflection report. Meeting with alumnus is part of the activities of this course to provide students with exposure to current industrial practices, legal issues, IT professionalism, and career paths.
4	Group Work	30%	1, 2, 4, 5	Students are required to conduct a group project, learning how to work as a team.

Assessment Rubrics:

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Marginal Pass (D)	Fail (F)
Citation and Reference	Sufficient references and properly used in-	Quite Sufficient references and	Some references and in-text	Just some but insufficient	No reference at all

	text citations without any obvious mistakes	properly used in-text citations with minor format mistakes	citations included; Occasional format and usage mistakes	references and no in-text citation	
Report Organization	Logically well-structured and balanced throughout the report and within each section. Also, all the points are well articulated.	Logically well-structured and balanced throughout the report and within each section	Logically structured and balanced in the overall sense	Not well logically structured with redundancy and bias on contents	Putting points collected from different sources without careful thoughts on organization
Students' Opinions	Unique and in-depth analysis/reflection which are well related to the topic and carefully developed	Manifest some higher-order understanding of the topic	Some systematic comments	Short and simple comments here and there in the report	Just a summary of the topic
Technical Depth	State-of-art technical details covered and clearly explained	Major key technical details covered and clearly explained	Some key technical details covered	Only some technical details but not well fit to the report	Just some general technical concepts
Effort	Solid contents and arguments; sufficient references; everything carefully formatted	Smoothly present and develop the points using their own wordings and organization; sufficient references	Use their own way to develop the report; some references; demonstrated format effort	Copy and paste from the Web with paraphrasing effort; some references added	Just copy and paste things from the Web
Presentation Skills	Able to present the technical matters in an effective, efficient, and innovative way.	Able to present the technical matters in an effective, and efficient way.	Able to present the technical matters in a satisfactory way.	Only some technical details can be presented .	Just some general content can be presented.

Course Content and CILOs Mapping:

Content		**CILO No.**
I	Report Writing Skills	4
II	Technical Presentation Skills	4
III	Core Areas of Computing	1, 2,5
IV	Overview of IT Industrial Practices, Legal Issues, Professionalism, and Careers	3,5

References:

- Selected articles from books, magazines, on-line references, etc.

Course Content:

Topic

I. Report Writing Skills

II. Technical Presentation Skills

III. Core Areas of Computing
- A brief introduction to basic concepts of computing
- A brief introduction to concentrations of studies
  - Computing and Software Technologies
  - Information Systems and Analytics
  - Artificial Intelligence
  - Data and Media Communication
- A brief introduction to emerging technologies

IV. Overview of IT Industrial Practices, Legal Issues, Professionalism, and Careers