UNIVERSITAS BAKRIE

Kode Mata Kuliah (*Course Code*): **COURSE CODE**	**Nama Mata Kuliah** (*Course Name*): **COURSE TITLE**
Program Studi (*Study Program*): **Informatics**	**Fakultas** (*Faculty*): **Engineering and Computer Science**
Mata Kuliah Pra-Syarat (*Course Pre-requisite*):	**Kredit** (*Credit*): **2**

Revision Date: **March 13, 2020**	**Kuliah** (*Lecture*): **2**	**Tutorial:** **0**	**Praktikum** (*Practicum*): **0**

Revisi (*Revision Status*): **2.0**	**Semester**: Ganjil/Odd **Tahun Akademik**: 2015/2016

Lecturer's Name:
Irwan Prasetya Gunawan

Prepared by: Name : Irwan Prasetya Gunawan Position : Lecturer Date : March 13, 2020 ( )	**Certified by**: Name : Hoga Saragih Position : Head of Department Date : ( )

COURSE DESCRIPTION

Describe the course in general; describe subject matter, approach, breadth, and applicability of the course.

COURSE OBJECTIVES

Show list of course objectives. The list usually consists of five or six statements, general but comprehensive. For example, upon completion of this course, the student should be able to:

- Understand the concepts
- Apply
- Have knowledge on $\cdots$
- etc

METHODS OF INSTRUCTIONS

This section should describe how the course will be conducted, e.g. group discussion, simulation, case study, collaborative learning, cooperative learning, project based learning, problem based learning (PBL), etc.

Classroom instruction consists of lectures and practical problem solving, supplemented by visual aids designed to assist the student to successfully meet the courses learning objectives.

It is imperative that students take an active interest in the course. To succeed in this course, students must read, think, and write in a critical and analytical manner and this takes time and practice. Such practice can only be achieved by working exercises. When troubles arise, and they will, the student must ask questions which may be directed to the instructor or other students in a variety of ways.

Students are also encouraged to work together on problem sets as part of their exercises. However, individual must ultimately demonstrate the understanding of the material by writing up his/her own solutions without the help of other students or their written work.

On average students need to spend, at least, 6 hours of study and preparation per week for this course.

ATTENDANCE REQUIREMENT

Comply with academic rules. Punctuality and regular attendance in classes is of prime importance for successful completion of this course. Students will be expected to arrive for class on time and to remain in class until the end of the class session.

Absence from lectures shall not exceed 22%. Students who exceed the 22% limit without a medical or emergency excuse acceptable to and approved by the Dean of the Faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course.

ASSESSMENT

Coursework evaluation will be weighted as follows:

- Mid Semester Test: 30%
- Final Semester Test: 40%
- Assignment: 20%
- Others (class participation, quiz/pretest): 10%
- Total: 100%

MATERIAL REFERENCES AND REQUIRED SUPPLIES

Mention all required main references, additional books and required tools and supplies (if any).
Textbooks:

[1] Jonathan Stein, Digital Signal Processing: A Computer Science Perspective, John Wiley & Sons, 2000

[2] Steven Smith, The Scientist and Engineers Guide to Digital Signal Processing, California Technical Publishing. Downloadable at http://www.dspguide.com/pdfbook.htm

Additional tools:

- Octave: http://www.gnu.org/software/octave/
- Matlab: http://www.mathworks.com/matlab/
- Audacity: http://www.audacityteam.org
- Python: http://www.python.org

COURSE OUTLINE

This section should show the targeted competencies, topics, sub-topics, specific method of instruction/ delivery, material references, and assessment indicators for each session.

Session	Targeted Competencies	Topics & Sub-Topics	Methods	References	Assignment
1	Understanding, Analytical Thinking, Programming Skills, etc for Session 1	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
2	Understanding, Analytical Thinking, Programming Skills, etc for Session 2	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
3	Understanding, Analytical Thinking, Programming Skills, etc for Session 3	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
4	Understanding, Analytical Thinking, Programming Skills, etc for Session 4	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
5	Understanding, Analytical Thinking, Programming Skills, etc for Session 5	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
6	Understanding, Analytical Thinking, Programming Skills, etc for Session 6	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7

7	Understanding, Analytical Thinking, Programming Skills, etc for Session 7	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
		MID SEMESTER TEST			
8	Understanding, Analytical Thinking, Programming Skills, etc for Session 8	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
9	Understanding, Analytical Thinking, Programming Skills, etc for Session 9	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
10	Understanding, Analytical Thinking, Programming Skills, etc for Session 10	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
11	Understanding, Analytical Thinking, Programming Skills, etc for Session 11	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
12	Understanding, Analytical Thinking, Programming Skills, etc for Session 12	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
13	Understanding, Analytical Thinking, Programming Skills, etc for Session 13	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7

14	Understanding, Analytical Thinking, Programming Skills, etc for Session 14	Data and Statistics: (a) Subtopics (b) Subtopics (c) Subtopics (d) Subtopics (e) Subtopics	Lecture, Discussion, Quiz	Chapter 1, pp. 1-20	Probs: 2, 3, 4, 5, 6, 7
FINAL SEMESTER TEST					