

**DAFTAR PENGISIAN MATERI KULIAH DOSEN MENGAJAR
SEMESTER GENAP TAHUN AKADEMIK 2019 / 2020
PROGRAM STUDI TEKNIK ELEKTRO**

Mata Kuliah : Metodologi Penelitian
Dosen : Ir. Rachman Soleman. MT.

Hari : Rabu
J a m : 17.30 - 19.00
Kelas : H

DUREN TIGA

| No. | Tanggal | Materi Kuliah | Jam Masuk / Keluar | Jml Mhs | Tanda Tangan |
|-----|-----------|---|-----------------------|------------|--------------|
| 1 | 11-Mar-20 | Preface. 1 Curiosity and research 1 1.1 Course goals 1 | 17.30-19.00 | | 1 |
| 2 | 18-Mar-20 | 1.2 Kinds of questions 1. 1.3 Research methods for science 3 1.4 Putting methods together 1.5. Assignments | | | 2 |
| 3 | 1-Apr-20 | 2 Overview of experimental analysis and design 18 2.1 Hypothesis-driven experiments 18 | 17.30-19.00 | | 3 |
| 4 | 8-Apr-20 | 2.2 Measuring values 30 2.3 Improving experiments 39 2.4 Safety and ethics 43 Assignments | | | 4 |
| 5 | 15-Apr-20 | 3 Statistics 51 3.1 Motivations for statistics 51 | 17.30-19.00 | | 5 |
| 6 | 22-Apr-20 | 3.2 Reducing many numbers to few 55 3.3 Probability distributions 61 3.4 Connecting data and probability distributions 70 | | | 6 |
| 7 | 29-Apr-20 | 3.5 What happens to averages as N increases 75 3.6 Central Limit Theorem 81 | 17.30-19.00 | | 7 |
| | 6-May-20 | Ujian Tengah Semester (UTS) | | | 8 |
| 8 | 13-May-20 | 3.7 Comparing many experimental measurements 92 3.8 Data with many values of independent variable 97 3.9 Other statistical tests 105 Assignments 105 | 17.30-19.00 | | 9 |
| 9 | 3-Jun-20 | 4 Mathematical models 112 4.1 Ingredients of mathematical modeling 112 4.2 Estimation 121 4.3 Linear regression 125 | | | 10 |
| 10 | 10-Jun-20 | 4.4 Matching arbitrary functions to data 128 4.5 Fourier transforms 133. 4.6 Deterministic modeling 136 Assignments 146 | 17.30-19.00 | | 11 |
| 11 | 17-Jun-20 | 5 Scientific information 151 5.1 Introduction 151 5.2 Writing a proposal 151 | | | 12 |
| 12 | 24-Jun-20 | 5.3 Writing scientific papers 152 5.4 Scientific figures 161 5.5 Giving scientific presentations 166 5.6 Searching for scientific information 168 | 17.30-19.00 | | 13 |
| 13 | 1-Jul-20 | 5.7 Obtaining scientific articles 172 5.8 Reading scientific papers 173 | | | 14 |
| 14 | 8-Jul-20 | 5.9 Final words 177 Assignments 178 | 17.30-19.00 | | 15 |
| | 15-Jul-20 | Ujian Akhir Semester (UAS) | | | 16 |

Research Methods for Science
MICHAEL P. MARDER
The University of Texas at Austin



Jakarta. 02 Maret 2020

Mengetahui :

KETUA JURUSAN

(Ir. HARLAN EFENDI. MT.)

Dosen Mengajar

(RACHMAN SOLEMAN. Ir. MT.)



Dosen :: H. Rachman Soleman, Ir. MT. :: 0186540 ::

KODEMK : 224008
MATAKULIAH : Metodologi Penelitian
KELAS : H
PESERTA : 5
KURIKULUM : 2018
PROGRAM STUDI : Teknik Elektro S1

PROGRAM PERKULIAHAN : Kampus ISTN Duren Tiga

PERIODE AKADEMIK : Genap 2019/2020 Duren Tiga

JADWAL : Rabu - 17:00-19:00 (C-5)

| Perkuliahan | TANGGAL PERTEMUAN | JAM | HADIR | TIDAK HADIR |
|------------------------------|-------------------|-------------|-------|-------------|
| PERTEMUAN 1 | 11/3/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 2 | 18/03/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 3 | 1/4/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 4 | 8/4/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 5 | 15/04/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 6 | 22/04/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 7 | 29/04/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 8 | 6/5/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 9 | 13/05/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 10 | 3/6/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 11 | 10/6/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 12 | 17/06/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 13 | 24/06/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 14 | 1/7/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 15 | 8/7/2020 | 17:30-19:00 | 5 | 0 |
| PERTEMUAN 16 | 15/07/2020 | 17:30-19:00 | 5 | 0 |

DAFTAR NILAI
SEMESTER GENAP REGULER TAHUN 2019/2020

Program Studi : Teknik Elektro S1
Matakuliah : Metodologi Penelitian
Kelas / Peserta : H
Perkuliahan : Kampus ISTN Durentiga
Dosen : H. Rachman Soleman, Ir. MT.

Hal. 1/1

| No | NIM | N A M A | ABSEN | TUGAS | UTS | UAS | MODEL | PRESENTASI | NA | HURUF |
|----|----------|----------------------------|-------|-------|-----|-----|-------|------------|------|-------|
| | | | 25% | 25% | 25% | 25% | 0% | 0% | | |
| 1 | 18223710 | Leo K Sinaga | 100 | 20 | 70 | 20 | 0 | 0 | 52.5 | D |
| 2 | 19223701 | Ramadhanu | 100 | 80 | 70 | 80 | 0 | 0 | 82.5 | A |
| 3 | 19223702 | Andrianna Eka Puji Lestari | 100 | 100 | 70 | 100 | 0 | 0 | 92.5 | A |
| 4 | 19223703 | Riza Puspitaningrum | 100 | 100 | 70 | 100 | 0 | 0 | 92.5 | A |
| 5 | 19223704 | Ucok Ronny Tua | 100 | 90 | 70 | 80 | 0 | 0 | 85 | A |

| Rekapitulasi Nilai | | | | | | | |
|--------------------|---|----|---|----|---|----|---|
| A | 4 | B+ | 0 | C+ | 0 | D+ | 0 |
| A- | 0 | B | 0 | C | 0 | D | 1 |
| | | B- | 0 | C- | 0 | E | 0 |

Jakarta, 17 August 2020

Dosen Pengajar


H. Rachman Soleman, Ir. MT.