

# Research Methods

## Leon Andretti Abdillah

**01**

**Introduction**

# Contents 1/2

1. Introduction
2. Basic Concept of Research
3. Problem Identification and Hypotheses
4. Literature Review
5. UH
6. Research Design
7. Methods, Techniques, and Instruments in Research
8. Research in Computer Science and Information Systems
9. UTS

# Contents 2/2

10. Quantitative Analysis in Research
11. Qualitative Analysis in Research
12. Research Proposal
13. Research Report
14. Scientific Article Writing
15. Presentation(s)
16. UAS

# Rules

- Each student must show their registration document
- Attendance  $\geq 80\%$
- Late tolerance = 15 minutes
- Keep your mobile devices silent (the lowest volume)
- Cloths must be tidy
- At final exam students must wear white shirt and black , and full shoes

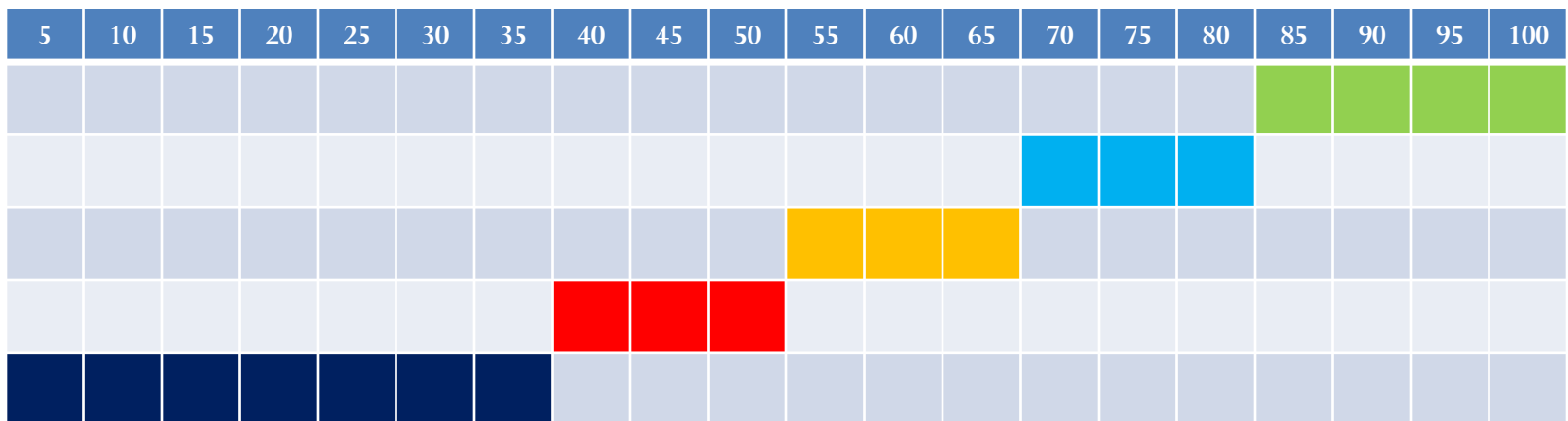
# Assessment Component

- Class activities                      20% [Questionnaire + Attendance]
  - Middle exam                            20% [MidEst + TheHighest\_eLearning]
  - Reports                                    20% [Assignments + Presentations]
  - Final exam                               40% [Final Test + Total\_eLearning]
  - Total                                        100%
- 
- For reports, a group of 6 students will present their work at the end of the semester as final presentation (5 minutes for each group)

# Assessment Score

## Score Penilaian

No.	Total Score	Nilai	Bobot
1	085 – 100	A	4
2	070 – 084	B	3
3	055 – 069	C	2
4	040 – 054	D	1
5	000 - 039	E	0



# Introduction

- Pengertian penelitian
- Ruang lingkup penelitian
- Mengapa perlu meneliti ?
- Prinsip penelitian
- Penerapan metode ilmiah
- Perkembangan penelitian bidang KTI-PD
- Prospek penelitian bidang KTI-PD

# Basic Terminology

- Penelitian in english = research,
  - Research ← re + search
  - Re=ulang, search=cari
  - So research = pencarian ulang
  - Pencarian ulang tersebut harusnya dengan cara tertentu



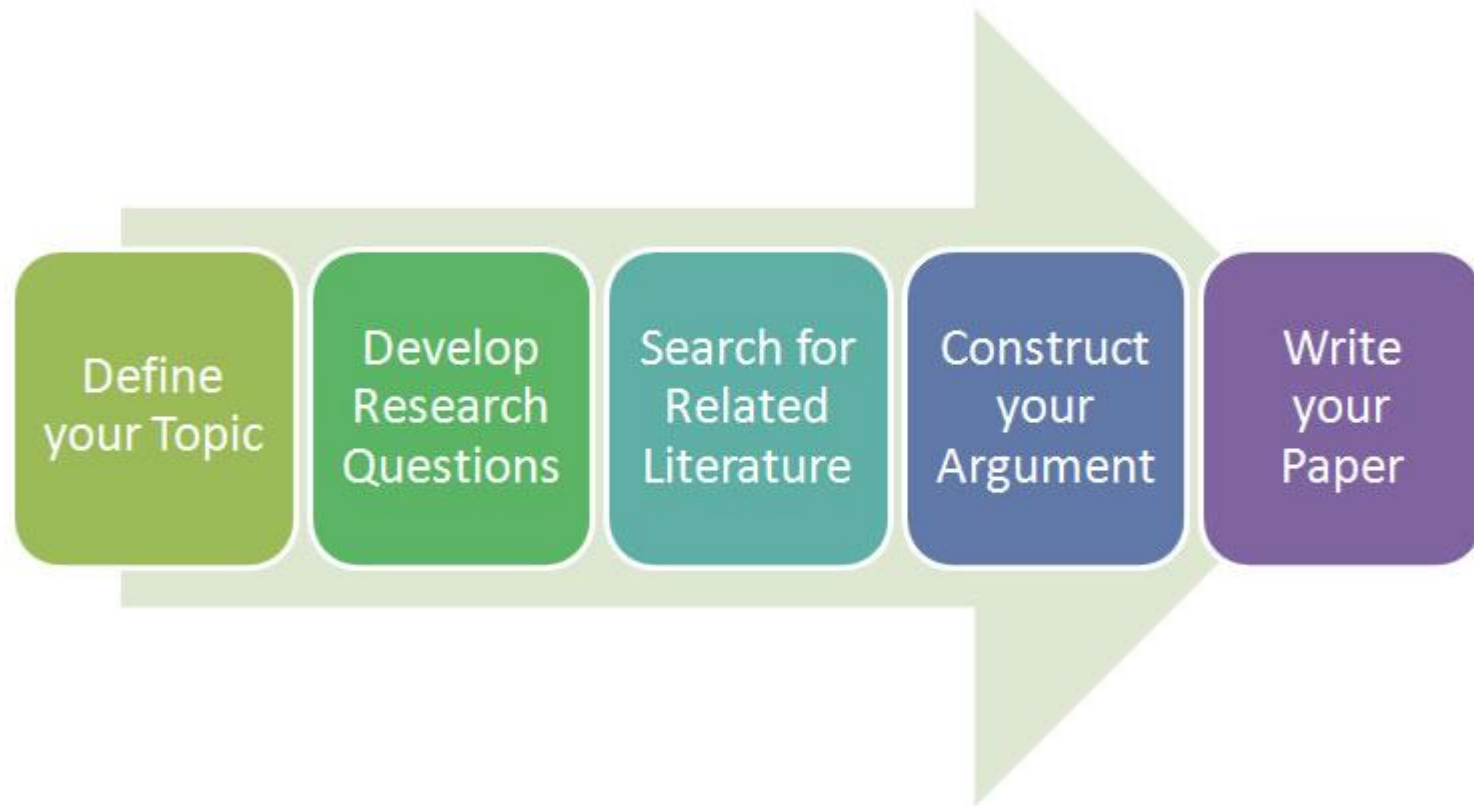
# Research Definition from Dictionary

- <http://www.merriam-webster.com/dictionary/research>
  - **1:** careful or diligent search
  - **2:** studious inquiry or examination; *especially* : investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws
  - **3:** the collecting of information about a particular subject
- <http://oxforddictionaries.com/definition/english/research>
  - the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.
- <http://www.thefreedictionary.com/research>
  - **1.** Scholarly or scientific investigation or inquiry.
  - **2.** Close, careful study.

# Definition of Research

- Penelitian dapat dikatakan sebagai cara mencari kebenaran melalui metode ilmiah, karena dalam mengungkapkan kebenaran penelitian digunakan metode ilmiah (Russeffendi, 1994).
- Penyelidikan sistematis yang ditujukan pada penyediaan informasi untuk menyelesaikan persoalan-persoalan (Cooper & Emory, 1996).
- Penelitian merupakan suatu proses mencari sesuatu secara sistimatis dalam waktu yang relatif lama dengan menggunakan metode ilmiah dengan prosedur maupun aturan yang berlaku (Hasibuan, 2007).

# Research Process



# Research Phases

- Penelitian terdiri atas beberapa tahapan yang saling terkait antara satu dengan yang lainnya. Dimana tahapan-tahapan itu pada umumnya terdiri dari:
  - 1. Identifikasi masalah
  - 2. Perumusan masalah
  - 3. Penelusuran pustaka
  - 4. Rancangan penelitian
  - 5. Pengumpulan data
  - 6. Pengolahan data
  - 7. Penyimpulan hasil

# Exercises

- Set a group for your team
- Define the topic for your initial project

# References

- [1] B. Kaplan and J. Maxwell, "Qualitative research methods for evaluating computer information systems," *Evaluating the Organizational Impact of Healthcare Information Systems*, pp. 30-55, 2005.
- [2] L. S. Musianto, "Perbedaan Pendekatan Kuantitatif dengan Pendekatan Kualitatif dalam Metode Penelitian," *Jurnal Manajemen dan Kewirausahaan*, vol. 4, pp. pp. 123-136, 2004.
- [3] M. Nazir, *Metode penelitian*. Jakarta: Ghalia Indonesia, 2003.
- [4] M.-C. Boudreau, *et al.*, "Validation in information systems research: A state-of-the-art assessment," *MIS quarterly*, pp. 1-16, 2001.
- [5] M. D. Myers, "Qualitative research in information systems," *Management Information Systems Quarterly*, vol. 21, pp. 241-242, 1997.
- [6] A. Pinsonneault and K. L. Kraemer, "Survey research methodology in management information systems: an assessment," *Journal of Management Information Systems*, pp. 75-105, 1993.

- [7] Riduwan, *Skala pengukuran variabel-variabel penelitian*. Bandung: Alfabeta, 2008.
- [8] M. E. Nasution and H. Usman, *Proses penelitian kuantitatif*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia, 2007.
- [9] L. N. Budiarti and A. EBW, *Metodologi penelitian*. Banting: Penerbit ITB, 2005.
- [10] M. S. Sumarsono, *Metode riset sumber daya manusia*. Yogyakarta: Graha Ilmu, 2004.
- [11] Istijanto, *Riset sumber daya manusia: cara praktis mendeteksidimensi-dimensi kinerja karyawan*. Jakarta: Gramedia Pustaka Utama, 2005.
- [12] H. Umar, *Metode riset bisnis*. Jakarta: Gramedia Pustaka Utama, 2003.
- [13] N. Indriantoro and B. Supomo, *Metodologi penelitian bisnis*. Yogyakarta: BPFE-Yogyakarta, 1999.
- [14] Z. A. Hasibuan. (2007). *Metodologi Penelitian pada Bidang Ilmu Komputer dan Teknologi Informasi (Konsep, Teknik, dan Aplikasi)*.