

TKB213273

DSS Based Diagnostic System

Sistem Diagnosis Berbasis Pendukung Keputusan

BASIC INFORMATION

Course Credit [sks]	3 / 100 minutes per Week
Course Type	Elective
Course Classification	Engineering Topics
Prerequisites	-

STUDENT AND LEARNING OUTCOMES

Covered Student Outcomes

Development of Engineering Solution (b)	-
Modern Tools Utilization (e)	Choose Student Outcome

Learning Outcomes

- LO1** Students are able to understand the concept of decision support system for medical diagnosis.
[CPMK 1: Mahasiswa mampu memahami konsep sistem pendukung keputusan untuk diagnosis medis.]
- LO2** Students are able to implement a decision support system for medical diagnosis.
[CPMK 2: Mahasiswa mampu mengimplementasikan sistem pendukung keputusan untuk diagnosis medis.]

COURSE DESCRIPTION

This course does not have any prerequisites. It overviews decision making techniques for medical diagnosis and its supporting technologies, as well as the current conditions for development and implementation. Decision system is required to support decision maker for making fast, appropriate, and accountable

decisions. For this purpose, a computer-based Decision Support-based Diagnostic System (DSS) is needed and is used as a tool to solve problems.

DESKRIPSI MATAKULIAH

Matakuliah ini tidak memiliki prasyarat.

Matakuliah ini membahas tentang teknik pengambilan keputusan untuk diagnosis medis dan teknologi pendukungnya, serta kondisi saat ini untuk pengembangan dan implementasi. Sistem keputusan dibutuhkan untuk mendukung pengambil keputusan dalam pengambilan keputusan yang cepat, tepat, dan akuntabel. Untuk itu diperlukan Decision Support-based Diagnostic System (DSS) berbasis komputer dan digunakan sebagai alat untuk menyelesaikan masalah.

TOPICS

1. The Basic Concept of Decision Support System (DSS)
[Konsep Dasar Sistem Pendukung Keputusan]
2. The Component and Classification of DSS [Komponen dan Klasifikasi DSS]
3. Modeling and Analysis in DSS [Pemodelan dan Simulasi Dalam DSS]
4. Mathematical Model in DSS [Model Matematis dalam DSS]
5. Sensitivity Analysis [Analisis Sensitivitas]
6. Decision Analysis [Analisis Keputusan]
7. Multi Criteria Decision Making [Pengambilan Keputusan Multi Kriteria]
8. User Interface and Visualization of Decision Making
[Antarmuka Pengguna dan Visualisasi Pengambilan Keputusan]
9. AI for Medical Diagnosis [AI untuk Diagnosis Medis]
10. Electronic Medical Record System [Sistem Rekam Medis Elektronik]

REFERENCES

1. Turban, E., Aronson, J. E. & Liang, T.P., 2005, Decision Support System and Intelligent Systems, 7 thed. New Jersey: Prentice Hall.

2. Berner, E.S., 2016, Clinical Decision Support Systems Theory and Practice, Third Edition, Switzerland: Springer International Publishing.