

CURRICULUM OF: Information Systems in Medicine

YEAR: 5

PROGRAMME: General Medicine

TEACHING FORM: Exercise

RANGE: 2h./week

ENDING FORM: C, E

week 1:

Information Technologies.

Introduction. The European Computer Driving Licence (ECDL). Fundamental objectives in medical information systems.

New trends in health care and development of outpatient care information systems (AIS) and hospital information systems (HIS). Data coding and classification. Data protection in information systems.

week 2:

Description of information systems (IS) in health care.

Electronic processing of patients' data. Introduction of information systems into health care and its reasoning. HIS application. Architecture of expert systems.

week 3:

Data protection in information systems.

Requirements on data protection in database systems.

week 4:

Data protection in information systems.

Legal aspects of data protection. Act on personal data protection.

week 5:

Data protection in information systems.

Introduction to cryptology and coding. History of cryptology. Cryptography and cryptoanalysis.

week 6:

Data protection in information systems.

Fundamentals of cryptology. Coding and decoding. Importance of coding in personal data processing in information systems.

week 7:

Electronic signature.

Definition of the concept based on cryptology.

week 8:

Electronic signature.

Electronic signature and its use in health care documentation.

week 9:

Act on health care.

Basic concepts. Health care documentation. Forms of health care documentation. Logging in health care documentation.

week 10:

Act on health care.

Data disclosure in health care documentation.

week 11:

Data application in management of health care facilities and scientific research.

Data assimilation from AIS and HIS in research. Fundamentals of mathematical and statistical processing of medical data and their application in diagnostics.

week 12:

Mathematical and statistical methods of medical data processing and graphical interpretation.

week 13:

Presentations. PowerPoint.

week 14:

Introduction to telemedicine. Videoconferences. Importance of telemedicine. Demonstration of videoconferencing.