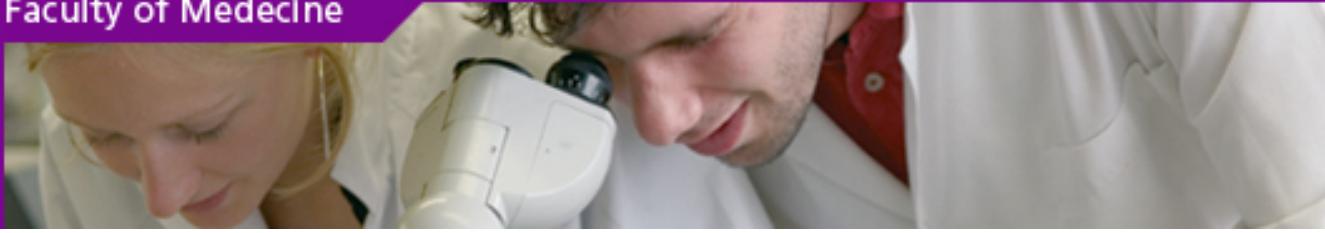## Faculty of Medecine

INFM2112   Medical Informatics

[15h+15h exercises] 2 credits

This course is taught in the 1st semester

Teacher(s):   Etienne De Clercq, Francis Roger France
Language: French
Level: Second cycle

Aims

- Introduction to applications of informatics in medicine
- Knowledge of vocabulary and basic concepts in health informatics
- Learning health information management methods
- To motivate students in order to acquire a "health information system culture"
- To make them aware of security issues, coding and processing methods in health information

Main themes

Theoretical courses:
- Objectives of the training
- Objectives of health informatics and application domains
- Aid to medical process
- Health systems management
- Choice of possibilities of development; informatics methods
- Patient electronic record
- Conclusions and future trends
Practical exercises
- Use of internet, WWW, Diagnoses and procedures coding
- Health libraries (MEDLINE); Tables (Excel), Databases (ACCESS)

Content and teaching methods

Theoretical courses give an overview of computer sciences technologies in the health sector, available software, relational data bases (object oriented), aid to decision making (Bayes, expert systems, #), laws and methods to protect security (data confidentiality, integrity, accessibility), networking, messages structure, electronic signature, architecture of hospital information systems, patient electronic record models, coding systems, #
Practical exercises are made in a computer room: data bases querying, literature search, statistical analysis, web navigation#

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite : None
Evaluation : Oral examination
Support : Lessons notes, copies of diaporama, articles
References :
- P. Degoulet et M. Fieschi. Traitement de l'information médicale. Méthodes hospitalières. Masson, 1991, 295 pp
- P. Degoulet et M. Fieschi. Introduction to clinical informatics. Springer, 1999, 246 pp
- J.H. van Bemmel, M.A. Musen. Handbook of medical informatics. Houten/Diegem, 1997, 621 pp.

Programmes in which this activity is taught

ESP3DS	Diplôme d'études spécialisées en santé publique
ESP3DS/DM	Diplôme d'études spécialisées en santé publique (gestion des données médicales)
ESP3DS/EP	Diplôme d'études spécialisées en santé publique (recherche clinique)
ESP3DS/ST	Diplôme d'études spécialisées en santé publique (santé au travail)
MDEN3DS/PE	Diplôme d'études spécialisées en science dentaire (médecine dentaire pédiatrique)
MDEN3DS/PR	Diplôme d'études spécialisées en science dentaire (prothèse dentaire)
MDEN3DS/TR	Diplôme d'études spécialisées en science dentaire (traitements conservateurs)
NUT2	Licence en sciences biomédicales (nutrition humaine)
SBIM3DS	Diplôme d'études spécialisées en sciences biomédicales

Other credits in programs

ESP3DS/EP	Diplôme d'études spécialisées en santé publique (recherche clinique)	(2 credits)
ESP3DS/TI	Diplôme d'études spécialisées en santé publique (santé au travail - toxicologie industrielle)	
SBIC22	Deuxième licence en sciences biomédicales (sciences biomédicales cliniques)	Mandatory