



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2023/2024		
MASTER'S DEGREE (MSC)	DIAGNOSTIC TECHNICAL HEALTH PROFESSIONS		
INTEGRATED COURSE	INTERDISCIPLINARY PROFESSIONALIZING PATH V- INTEGRATED COURSE		
CODE	22291		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	MED/50		
HEAD PROFESSOR(S)	SALERNO SERGIO	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)	SALERNO SERGIO TURDO ALICE	Professore Associato Ricercatore a tempo determinato	Univ. di PALERMO Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>SALERNO SERGIO Monday 14:00 17:00 Dipartimento BIND Plesso di Radiologia Il piano stanza 132 Tuesday 14:00 17:00 Dipartimento BIND Plesso di Radiologia Il piano stanza 132</p> <p>TURDO ALICE Wednesday 15:00 17:00 Laboratorio di fisiopatologia cellulare e molecolare, via del vespro 131 -presso Dermatologia (primo piano)-</p>		

MODULE HEALTH TECHNOLOGY ASSESSMENT

Prof. SERGIO SALERNO

SUGGESTED BIBLIOGRAPHY

Health Technology Assessment. Governance tecnologica per la sanita. ISBN: 9788868962357

AMBIT	20418-* Scienze e tecniche di neurofisiopatologia
INDIVIDUAL STUDY (Hrs)	51
COURSE ACTIVITY (Hrs)	24

EDUCATIONAL OBJECTIVES OF THE MODULE

Concepts relating to Health Technology Assessment (HTA) in healthcare as a multidisciplinary and multiprofessional assessment of the welfare, economic, social and ethical consequences caused directly and indirectly, in the short and long term, by existing and newly introduced healthcare technologies in diagnostics related to technologies in the health sector.

SYLLABUS

Hrs	Frontal teaching
4	Definition of HTE in healthcare
4	Multi Criteria Decision Analysis
8	governance and HTE
4	allocated appropriateness of technologies
4	technology and cost

MODULE
OMICS SCIENCES IN DIAGNOSTICS

Prof.ssa ALICE TURDO

SUGGESTED BIBLIOGRAPHY

- Articoli scientifici
- Risorse di rete forniti dal docente al termine delle singole lezioni
- Manuela Helmer Citterich Fabrizio Ferrè Giulio Pavesi Graziano Pesole Chiara Romualdi. Fondamenti di bioinformatica. 2018. Zanichelli

AMBIT	20424-Scienza della prevenzione e dei servizi sanitari
INDIVIDUAL STUDY (Hrs)	51
COURSE ACTIVITY (Hrs)	24

EDUCATIONAL OBJECTIVES OF THE MODULE

Acquisition of the fundamental notions (theoretical and practical) for the critical evaluation of the methodologies relevant to the Omics Sciences, and of the meaning of the data obtainable from them, in relation to the specific pathological conditions and instrumentation used. The student will have to acquire the methodological bases, as well as sufficient experience to be able to decide when to use a specific tool, and at the same time have the ability to access and interpret the biochemical and molecular data as a diagnostic and prognostic tool, using the right tools of computer analysis and statistics.

SYLLABUS

Hrs	Frontal teaching
2	introduction to omics sciences (genomics, transcriptomics, proteomics and metabolomics) and bioinformatics applied in research and clinical in neoplastic and non-neoplastic diseases
2	Query of the main databases containing clinical and biological information (Kegg, miRBase, TCGA, cBioPortal, DepMap)
8	knowledge of the main tools for obtaining big data (NGS, RNAseq, single cell sequencing, spacial transcriptomics) and data analysis
3	Digital PCR, digital pathology, artificial intelligence and tools for the evaluation of the data obtained
3	DEPArray technology and downstream applications (single cell sequencing)
3	Application of omics sciences to liquid biopsy
3	bioimaging e radiogenomics