

Course	Study year (semester)	Theory	Tutorial classes
Bacteriology and Antibiotics (19h30)	3 (S1)	Functional anatomy and bacterial genetics Antibiotics, classification and mechanism of action Staphylococcus, Pneumococcus and Enterobacteria Meningococcus, group A Streptococcus Sexually transmitted infections bacteria Laboratory's role in the diagnosis of bacterial infections Diarrhoea bacteria Antibiotics, resistance mechanism, current problems of resistance	Antibiotics, urinary infection ENT Infections and meningitis Community-acquired respiratory infections and tuberculosis Syndromic diagnosis BVP
Parasitology – Mycology (15h)	3 (S1)	Introduction 1 Parasitology Introduction 2 Mycology	Parasitosis and tropical/opportunistic/home-grown mycosis Synthesis
Cardiology (18h)	3 (S1 or S2)	Coronary disease Cardiac failure Electrocardiogram & rhythm disorder Non coronary Thoracic pain & venous thromboembolic disease 1	

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		Non coronary Thoracic pain & venous thromboembolic disease 2 Valvulopathy and endocarditis Risk factors & Hypertension ,Peripheral artery occlusive disease et Aortic dissection 21 hours	
Virology (23h)	3 (S1)	Structure & classification of viruses / Multiplication of viruses & targets for antiviral chemotherapy Physiopathology of viral infections & virological diagnosis HIV : structure, multiplication, physiopathology, epidemiology, diagnosis, follow-up and therapeutic approach Rabies, enterovirus Herpes viridae : general characteristics & pathophysiology / Alpha-herpes virinae : HSV, VZV Beta- et Gamma-herpes virinae : CMV, EBV Virus of viral hepatitis A, B, C, D et E (I) Virus of viral hepatitis A, B, C, D et E (II) Rubella, parvovirus B19, papillomavirus Gastroenteritis virus (digestive aenovirus included) Arbovirus 11 hours	Herpes virus HIV infection Viral hepatitis Respiratory infections Virus and pregnancy 10 hours
Pulmonology (18h)	3 (S1 or S2)	Asthma / Allergies Occupational diseases Cough Haemoptysis Pulmonary function test Pulmonary embolism / pulmonary arterial Hypertension Sleep disorders - adults Thoracic pain	

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		<p>Dyspnoea Sarcoidosis/ diffuse interstitial lung disease Autoimmune diseases Radiology Chronic obstructive pulmonary disease / Chronic respiratory failure (CRF) Tobacco Bronchial carcinoma / opacity test Pleural effusion Pneumothorax Community-acquired broncho-pulmonary infections among adults Bronchial tube dilatation Foreign body in bronchus Tuberculosis 21 hours</p>	
<p>Dermatology (12h)</p>	<p>3 (S1 or S2)</p>	<p>Angiomas, Purpura, Raynaud syndromes, Mucosal ulcerations, Dermatological manifestations of lupus and sarcoidosis Facial dermatoses, Psoriasis, Erythroderma, Autoimmune bullous dermatosis, Leg ulcers Bacterial and mycosis mucocutaneous infections: impetigo, folliculitis/furuncle, erysipelas Lipoedema Viral & mycotic infections Sexually transmitted diseases , HIV, ectoparasitic Skin tumour, skin complications of organ transplantations, warts Urticarial, eczema, toxidermy, topical corticosteroids</p>	

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Neurology (24h)	3 (S1 or S2)		<p>Recent neurological deficit. Motor and/or sensory deficit of the limbs</p> <p>Recent neurological deficit. Motor and/or sensory deficit of the limbs or face</p> <p>Walking, balance and vertigo disorders</p> <p>Where is the injury ? (the question and the answer)</p> <p>Dementia and confusion</p> <p>Acute and chronic headache, migraine & facial pain</p> <p>Parkinson's disease & movement disorders</p> <p>Multiple Sclerosis</p> <p>Loss of consciousness, epileptic seizure - adults</p> <p>Epilepsy</p> <p>Consciousness disorders, neurological complications of alcoholism</p> <p>Vascular cerebral accidents 1</p> <p>Vascular cerebral accidents 2</p> <p>Subarachnoid hemorrhage & head trauma</p> <p>Meningitis & Meningoencephalitis</p> <p>Myasthenia & muscular diseases</p> <p>Guillain Barré and peripheral neuropathy</p> <p>Medullary compression, cauda equina syndrome</p> <p>Intracranial tumors</p> <p>Pathological neurological Anatomy</p> <p>Neuropharmacology 1</p> <p>Neuropharmacology 2</p> <p>Neuroradiology 1</p> <p>Neuroradiology 2</p> <p>Neurotraining : 2 sessions</p>

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			26 hours
Hepatic-gastroenterology (24h)	3 (S1 or S2)	<p>Occlusive syndromes Vomiting Ascites Chronic diarrhoea Chronic inflammatory intestine disease Icterus Imagery 1 Imagery 2 Gastroesophageal reflux disease, Hiatal hernia</p>	<p>Digestive hemorrhage. Stomach tumor Acute Hepatitis: virus, alcohol, drugs, autoimmune Chronic Hepatitis Anatomical pathology reporting - 2 sessions Appendicitis, Peritonitis Gastroduodenal ulcers, Gastritis Digestive parasitosis Pancreatic cancer, Chronic Pancreatitis Acute pancreatitis Cirrhosis and its complications Colorectal tumors: epidemiology & screening Colorectal tumours Acute diarrhea Hemochromatosis Biliary lithiasis and its complications Benign and malignant primary and secondary liver tumours Diverticular disease, sigmoiditis Functional bowel disorders Dysphagia, esophageal tumor Hernia Anal pathologies (hemorrhoid included)</p>

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Infectious and transmissible diseases (35h)	4 (S1)	<p>Proper use of anti-infectives - infectology basics Herpes virus infection Anthiobiotherapy, resistance Immunodepression (HIV not included) antibiotherapy, resistance Genital infections - STDs Infection HIV : prevention, Infection HIV : care Febrile exanthema in children / Pertussis, Mumps</p>	<p>Broncho-pulmonary infections / Sore throats/sinusitis Fungal infections Meningitis and meningoencephalitis Urinary infections/nosocomial infections Sepsis/Bacteremia Pathology of inoculation/ Tetanus Travel pathologies and advice to travellers Vaccination Public health feedback Infective endocarditis, monitoring of valve/implant holders Bone and joint infections/Discospondylitis Antibiotics: prescription and monitoring Tuberculosis Soft tissues infections</p>
Occupational health, legal medicine (11h)	4 (S1)	<p>Medical certificates, violence, sexual violence 2h Health at work 3h Patients rights, medical liability 2h Death, organ donation legislation, notion of expertise 2h Sexual violence: feedback 2h</p>	
Disability - Dependence (9h)	4 (S1)	<p>The concept of disability - Decubitus complications Basic principles of rehabilitation for rheumatological and orthopaedic conditions Main rehabilitation techniques and cognitive rehabilitation of neurological diseases Main rehabilitation techniques and neuromotor rehabilitation of neurological pathologies Perineal disability Children's disability Hearing impairment Disability and psychiatric conditions</p>	

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		Visual disability	
Emergency Medicine/Intensive Care (27h)	4 (S1 or S2)	<p>Is my patient severely sick? Heart attack Cardiopulmonary arrest General/local-regional anaesthesia Taking charge of burn patients</p> <p>Blood transfusion & blood-derived products : indications, complications Haemovigilance Main acute poisonings Serious infectious pneumopathy Chest pain : Pulmonary embolism (PE), Acute coronary syndrome (ACS), dissection Febrile coma Hyponatremia, hypernatremia Acute troubles of acid-basic balance Severe infective endocarditis Polytrauma Head trauma Subarachnoid hemorrhage Cardiogenic shock Acute infection / antibiotic therapy Haemorrhagic shock / blood exposure accident Nosocomial infections Septic shock</p>	<p>Acute respiratory/renal failure Choc with abdomen pain / pancreatitis Troubles of acido-basic balance Severe ionic disturbances Acute and chronic respiratory failure (COPD, asthma) Lipoedema</p>

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Rheumatology (21h)	4 (S1 or S2)	Spine Polyarthritis rheumatoid, PPR, Horton Spondylarthritis Osteoporosis and other rarefied osteopathies (including vertebral compression) Arthrosis and limb pain Tumoral pathology Infections (and parallel with reactive arthritis) Microcrystalline arthritis, algodystrophies	
Orthopaedics (13h30)	4 (S1 or S2)	Paediatric orthopaedic knee trauma Polytrauma Wrist/femoral neck fracture	
Obstetrics - Gynecology (35h)	4 (S1 or S2)	Fever during pregnancy / abortion / gestational diabetes Extra-uterine pregnancy / Female genital infection / pelvic pains / Acute abdominal pain / reproductive organs haemorrhage Normal pregnancy / postpartum haemorrhage / pregnancy & post-partum mental disorders Pregnancy hypertension, preeclampsia, delivery & puerperium / pathological puerperium/ Breastfeeding and complications Threat of preterm birth / prematurity & intrauterine growth retardation Foetal risks prevention/Problems arising from genetic diseases Sterility of the couple / medically assisted procreation / abnormalities of the menstrual cycle, metrorrhagia / Contraception / menopause and andropause/ Amenorrhea Uterine body tumours (fibroids, endometrial cancer) / Cervical tumours (pre-neoplastic lesions, cervical cancer) / Ovarian tumours Breast tumours	

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		36 hours	
Urology (16h)	4 (S1 or S2)	Urology cancerology (prostate non included) Incontinence, pelvic floor, fertility disorders Prostate : benign prostatic hypertrophy; cancer & radiology in urology Urology emergencies: infection, traumatology, lithiasis & scrotal pathologies, ...	
Nephrology (18h)	4 (S1 or S2)	Acute renal failure (ARF) and haematuria Urinary lithiasis Lupus and chronic interstitial nephropathy (CIN) Chronic kidney disease Myeloma, hypercalcemia, diabetes Chronic vascular neuropathy Polycystic kidney disease & kidney tumour Kidney & pregnancy, thrombotic microangiopathies (TMA), acute vascular nephropathy Kidney & drugs, seniors' kidneys Revisions Glomerular syndromes (including Nephrotic syndrome (NS) and Rapidly progressive glomerulonephritis (RPGN)) Acid base & hydro electrolytic disorder	
Psychiatry (adults/children) (34h)	5 (S1)	Basics of the classifications of mental disorders : child / adult Risk factors, prevention, screening of psychological disorders from children to the elderly Describe the organisation of the psychiatric care offer, from children to the elderly	

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		<p>Psychomotor development of infants and children Infant / child / adult sleep disorders The disabled child: orientation and care Psychological disability Pervasive developmental disorders (PDD) Psychiatric treatment without consent Adolescent and adult schizophrenic disorder Persistent delusional disorder Prescription and monitoring of psychotropic drugs (Antipsychotics, hypnotics, anxiolytics, antidepressants, thymoregulators) Agitation and acute delirium (dosage) Acute anxiety and panic attacks (dosages) Generalized anxiety disorder, panic disorder, phobic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, adjustment disorder (from child to senior), personality disorder Somatoform disorders at all ages Different types of psychotherapeutic techniques Eating disorders: children & adults Behavioral disorders : adolescents Psychological disorders : seniors Normal and pathological bereavement Diagnosing: depressive disorder Adult bipolar disorder Adolescent Bipolar Disorder : Diagnostic, follow up planification for each step of illness Suicidal risk and behaviour in children, adolescents and adults: identification and management Diagnose: obsessive-compulsive disorder trouble, post trauma stress disorder</p>	

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		<p>Different types of psychotherapeutic techniques Psychic disorders of pregnancy and post-partum Normal sexuality and its disorders Diagnosing: a personality disorder Addiction to tobacco Alcohol addiction Addiction to cannabis Addiction to psychotropic drugs (benzodiazepines and related substances) Addiction to cocaine, amphetamines, opiates, synthetic drugs Behavioural addictions Doping 20 hours</p>	
<p>Paediatrics (27h)</p>	<p>5 (S1)</p>	<p>Allergology / Asthma / Allergy Pediatric Orthopedic Surgery Visceral Surgery Pain Growth /adrenal insufficiency / Puberty Nutrition : infant, child Constipation / acute diarrhoea / chronic diarrhoea Vomiting / Gastroesophageal Reflux Obesity Neonatology Infectology in paediatrics Vaccinology Pneumology in paediatrics Nephrology Haematology</p>	

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		Neuro-paediatrics Pediatric resuscitation Paediatric emergencies Pediatric Radiology 36 hours	
Internal medicine	5 (S1)	Lupus / Antiphospholipid syndrome (APS) Autoimmune diseases / Corticosteroids / Biotherapies Inflammatory reaction / prolonged fever / deterioration of general state / Amyloidosis Sarcoidosis / Splenomegaly / Adenopathy / Immunodeficiency Vasculitis / peripheral vascular disease	
Geriatrics (14h)	5 (S1)	Fall Osteoporosis Hypothyroidism Dyspnoea Cardiopathy Transfusion / anticoagulation Hypercalcemia Undernutrition Anaemia Analgesics/ iatrogenic Bed sores Dysnatremy Hearing / vision Neuro cognitive disorders Post-fall syndrome Confusional syndrome	

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		<p>Depression Fainting Legal protection</p>	
<p>Oncology (18h)</p>	<p>5 (S1)</p>	<p>Skin, epithelial and melanoma tumours / primary and secondary bones tumours Cancer: Epidemiology, risk factors, prevention & testing, carcinogenic potential, oncogenetics Diagnostic of cancers : warning signs & para-clinic investigations ; stage characterisation ; prognosis Cancer treatment : surgery, radiotherapy, medical treatments for cancer (chemotherapy, targeted therapies, immunotherapy). Multidisciplinary therapeutic decision and information to the patient. Caring and accompanying of cancer patient at all stages of disease, including the palliative care stage, addressing technical, relational, social and ethical issues. Symptomatic treatments. Monitoring methods. Mouth, nasosinus and cavum, upper aerodigestive tract tumour Intracranial tumours Tumours: cervical, endometrial, ovaries, colon, rectum, liver (primary & secondary), stomach, oesophagus, pancreas, lung (primary & secondary), prostate, kidney, testicular, bladder, breast</p>	
<p>Haematology (22h30)</p>	<p>5 (S1)</p>	<p>Deficiency anaemia Hemolytic anaemia Coagulation abnormalities Haematotransfusion Chronic Lymphoid Leukaemia, splenomegaly, mononucleosis syndrome Lymphoma & ganglia Myelodysplasia, acute leukaemia, agranulocytosis</p>	

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		<p>Myeloma, monoclonal gammopathy Thrombocytopenia/thrombopathies/primary haemostasis Antithrombotic treatment/anticoagulant incidents Vaquez, disease, thrombocythemia, Chronic myeloid leukaemia, Eosinophilia</p>	
<p>Pathological Anatomy (19h)</p>	<p>3 (S2)</p>	<p>Pathological anatomy : Objectives and means Inflammatory Pathology 1 Inflammatory Pathology 2 Tumour Pathology 1 : Definitions Vocabulary / Terminology Benign / Malignant Classification and nomenclature principles Main types of tumor Tumour Pathology 2: Cancer Cells and Cancerous Tissue Natural history of cancer pre-cancerous lesions / dysplasia local phase: carcinoma in situ and invasion Tumour Pathology 3: Metastases Cancer and Pathological Anatomy Vascular pathology</p>	<p>Appendicite, cirrhosis, tuberculosis, sarcoidosis Bilharzia, Amyloidosis, Thrombosis, recent and old myocardial infarction, Review of non-tumour pathology, Colon adenoma and adenocarcinoma, hepatic metastasis, uterine leiomyoma and leiomyosarcoma Cervical cancer in situ, invasif cervical carcinoma, lung cancer, brain metastasis Tumour pathology review</p>
<p>Pharmacology (18h)</p>	<p>3 (S2)</p>	<p>Antithrombotics Diabetes drugs Contraceptive, menopause/sexual dysfunctions treatment Antihypertensive & Diuretics Anti-inflammation agents (steroidal/non-steroidal) Painkillers</p>	

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		Antibiotics, antifungals & anti parasitic Psychotropics Anticancer Antiviral Hypolipidemic	
Public Health & critical lecture of medical articles (32h)	3 (S2)	French law of ethics and scientific integrity E-learning programme : Writing an article/publication process Measuring health status Quality - risk management Scientific integrity/key issues Conference Program : Medical Ethics: items 2 and 8 Presentation of EU 1 IAS, therapeutic hazard and compensation for error – Patient rights, medical liability Occupational medicine, occupational health Medical certificates Sexual violence Introduction to critical reviewing articles, different types of studies, regulatory aspects Applied biostats and exercises 1/2 Case control Cohort therapeutic trials 1	

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		therapeutic trials 2 diagnosis, screening biostats, applied and exercises 2/2 Evidence-based medicine, literature search, systematic reviews and meta-analyses Scientific integrity: case study	
Ophtalmology (12h)	3 (S2)	Ocular examination Refraction anomalies Cataract Eyelid Pathology Examination of oculomotricity and diplopia Retro-bulbar optical neuritis (NORB) Anterior ischemic optic neuropathy (AION) Diabetic retinopathy Age-related macular degeneration (AMD) Impaired visual function Red and/or painful eye Chronic glaucoma Infant follow up: screening ocular dysfunctions Strabismus Sudden visual acuity loss (VAD) Central retinal artery occlusion (CRAO) Central retinal vein occlusion (CRVO) Ocular trauma Ocular burns Cornea sampling Cornea transplantation	

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Maxillo-facial Surgery (12h)	2(S2)		
Otorhinolaryngology (12h)	3 (S2)	<p>Otalgia and otitis: adult/child Audio-vestibular explorations Nasal-sinus infections : adult/child Epistaxis (with treatment) Facial paralysis Rock fracture Vertigo (with treatment) Impairment of auditory function : child/adult Acute respiratory distress : new-born/child Foreign body in upper aero tract Adults : acute respiratory distress Acute speech trouble Dysphonia Chronic and acute dyspnoea Dysphagia Mouth cavity & upper aero-digestive tract tumours Superficial lymphadenopathy</p>	
Pain relief - Palliative care (10h)	4 (S2)	<p>Chronic and acute pain (2 sessions) Palliative care (2 sessions) Children's pain</p>	

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Genetics applied to Medicine (12h)	4 (S2)	Course divided into 3 modules of 4 hours each: - chromosomal genetics module - pediatric genetics module (cystic fibrosis, achondroplasia, Steinert's disease, X-fragile syndrome, dystrophinopathy) - adult genetics module (Huntington's disease, mitochondrial diseases, monogenic forms of common diseases such as heart disease-diabetes-etc, genetic predisposition to cancer)	Each module consists of 2 hours of lectures, and 2 hours of tutorials with practical exercises.
Endocrinology & Nutrition (28h)	4 (S2)	Diabetes (2 sessions) Gonads Endocrine-induced hypertension and cardiovascular risk factors Pituitary gland Nutrition and undernutrition Obesity Thyroid, parathyroid, nuclear medicine	
General medicine	4 (S2)	Children's health Elderly people at home Care of a chronically ill patient	