University Medicine

Syllabus Checklist ·

Tick one box per statement: ☐ not yet ☐ nearly ☐ confident. / /

1. Cell and Molecular Biology for Medicine ( )

1.1 Cell organisation and organelles

☐☐☐ Cell organisation and organelles

1.2 Membranes and transport

☐☐☐ Membranes and transport

1.3 DNA replication and repair DNA

☐☐☐ DNA replication and repair

1.4 Gene expression – transcription and translation —

☐☐☐ Gene expression – transcription and translation

1.5 Regulation of gene expression

☐☐☐ Regulation of gene expression

1.6 Cell signalling

☐☐☐ Cell signalling

1.7 Cell cycle, cell death and cancer biology 、

☐☐☐ Cell cycle, cell death and cancer biology

2. Medical Biochemistry

2.1 Proteins and protein structure

☐☐☐ Proteins and protein structure

2.2 Enzymes and enzyme kinetics

☐☐☐ Enzymes and enzyme kinetics

2.3 Bioenergetics and glycolysis

☐☐☐ Bioenergetics and glycolysis

2.4 TCA cycle and oxidative phosphorylation

☐☐☐ TCA cycle and oxidative phosphorylation

2.5 Glycogen and gluconeogenesis

☐☐☐ Glycogen and gluconeogenesis

2.6 Lipid metabolism

☐☐☐ Lipid metabolism

2.7 Nitrogen metabolism and the urea cycle

☐☐☐ Nitrogen metabolism and the urea cycle

2.8 Integration of metabolism: fed, fasting and diabetes

☐☐☐ Integration of metabolism: fed, fasting and diabetes

3. Human Anatomy

3.1 Anatomical language, planes and imaging

☐☐☐ Anatomical language, planes and imaging

3.2 Upper limb

☐☐☐ Upper limb

3.3 Lower limb

☐☐☐ Lower limb

3.4 Thorax

☐☐☐ Thorax

3.5 Abdomen

☐☐☐ Abdomen

3.6 Pelvis and perineum

☐☐☐ Pelvis and perineum

3.7 Head and neck

☐☐☐ Head and neck

3.8 Back and vertebral column

☐☐☐ Back and vertebral column

4. Histology and Embryology

4.1 Microscopy and tissue preparation

☐☐☐ Microscopy and tissue preparation

4.2 Epithelium and connective tissue

☐☐☐ Epithelium and connective tissue

4.3 Muscle and nervous tissue

☐☐☐ Muscle and nervous tissue

4.4 Organ histology: circulatory, respiratory and digestive

☐☐☐ Organ histology: circulatory, respiratory and digestive

4.5 Organ histology: urinary, endocrine, reproductive and skin

☐☐☐ Organ histology: urinary, endocrine, reproductive and skin

4.6 Early development: fertilisation to gastrulation

☐☐☐ Early development: fertilisation to gastrulation

4.7 Organogenesis and congenital anomalies

☐☐☐ Organogenesis and congenital anomalies

5. Human Physiology

5.1 Homeostasis and body fluids

☐☐☐ Homeostasis and body fluids

5.2 Excitable cells and muscle

☐☐☐ Excitable cells and muscle

5.3 Cardiovascular physiology

☐☐☐ Cardiovascular physiology

5.4 Respiratory physiology

☐☐☐ Respiratory physiology

5.5 Renal physiology and acid–base

☐☐☐ Renal physiology and acid–base

5.6 Gastrointestinal physiology

☐☐☐ Gastrointestinal physiology

5.7 Endocrine and reproductive physiology

☐☐☐ Endocrine and reproductive physiology

6. Medical Genetics

6.1 Chromosomes and karyotypes

☐☐☐ Chromosomes and karyotypes

6.2 Mendelian inheritance and pedigrees

☐☐☐ Mendelian inheritance and pedigrees

6.3 Non-Mendelian inheritance

☐☐☐ Non-Mendelian inheritance

6.4 Mutation and variant interpretation

☐☐☐ Mutation and variant interpretation

6.5 Population genetics

☐☐☐ Population genetics

6.6 Genetic testing and counselling

☐☐☐ Genetic testing and counselling

6.7 Multifactorial disease and pharmacogenomics

☐☐☐ Multifactorial disease and pharmacogenomics

7. Medical Immunology

7.1 Innate immunity

☐☐☐ Innate immunity

7.2 Antigen recognition: antibodies, receptors and MHC

(MHC)

☐☐☐ Antigen recognition: antibodies, receptors and MHC

7.3 Adaptive responses: T and B cells

T B

☐☐☐ Adaptive responses: T and B cells

7.4 Immunological memory and vaccination

☐☐☐ Immunological memory and vaccination

7.5 Hypersensitivity

☐☐☐ Hypersensitivity

7.6 Autoimmunity and tolerance

☐☐☐ Autoimmunity and tolerance

7.7 Immunodeficiency and transplantation

- [ ] Immunodeficiency and transplantation

8. Medical Microbiology and Infection

8.1 Classification and the diagnostic laboratory

- [ ] Classification and the diagnostic laboratory

8.2 Bacteria: structure, growth and pathogenesis

- [ ] Bacteria: structure, growth and pathogenesis

8.3 Viruses

- [ ] Viruses

8.4 Fungi and parasites

- [ ] Fungi and parasites

8.5 Host–pathogen interaction and transmission

- [ ] Host–pathogen interaction and transmission

8.6 Antimicrobials and resistance

- [ ] Antimicrobials and resistance

8.7 Infection prevention and control

- [ ] Infection prevention and control

9. Neuroscience

9.1 Neurons, synapses and neurotransmitters

- [ ] Neurons, synapses and neurotransmitters

9.2 Somatosensory and pain pathways

- [ ] Somatosensory and pain pathways

9.3 Motor systems

- [ ] Motor systems

9.4 Special senses

- [ ] Special senses

9.5 Autonomic nervous system

- [ ] Autonomic nervous system

9.6 Higher functions: sleep, memory and language

☐☐☐ Higher functions: sleep, memory and language

9.7 Lesion localisation

☐☐☐ Lesion localisation

10. Pathology

10.1 Cell injury, adaptation and death

☐☐☐ Cell injury, adaptation and death

10.2 Inflammation and repair

☐☐☐ Inflammation and repair

10.3 Haemodynamic disorders

☐☐☐ Haemodynamic disorders

10.4 Neoplasia

☐☐☐ Neoplasia

10.5 Cardiovascular and respiratory pathology

☐☐☐ Cardiovascular and respiratory pathology

10.6 Gastrointestinal, liver and renal pathology

☐☐☐ Gastrointestinal, liver and renal pathology

10.7 Laboratory medicine and the pathology report

☐☐☐ Laboratory medicine and the pathology report

11. Pharmacology

11.1 Pharmacokinetics

☐☐☐ Pharmacokinetics

11.2 Pharmacodynamics

☐☐☐ Pharmacodynamics

11.3 Autonomic pharmacology

☐☐☐ Autonomic pharmacology

11.4 Cardiovascular and renal drugs

☐☐☐ Cardiovascular and renal drugs

11.5 Antimicrobial and anticancer drugs

☐☐☐ Antimicrobial and anticancer drugs

11.6 CNS drugs and analgesia

☐☐☐ CNS drugs and analgesia

11.7 Adverse reactions, interactions and safe-medication principles

☐☐☐ Adverse reactions, interactions and safe-medication principles

12. Epidemiology, Biostatistics and Evidence-Based Medicine

12.1 Measuring disease: incidence and prevalence

☐☐☐ Measuring disease: incidence and prevalence

12.2 Study designs

☐☐☐ Study designs

12.3 Bias, confounding and causation

☐☐☐ Bias, confounding and causation

12.4 Diagnostic tests

☐☐☐ Diagnostic tests

12.5 Statistical inference for clinical data

☐☐☐ Statistical inference for clinical data

12.6 Clinical trials and systematic reviews

☐☐☐ Clinical trials and systematic reviews

12.7 Critical appraisal and applying evidence

☐☐☐ Critical appraisal and applying evidence

13. Clinical Foundations – – Communication, Reasoning and Ethics

13.1 The consultation and history-taking

☐☐☐ The consultation and history-taking

13.2 Principles of physical examination

☐☐☐ Principles of physical examination

13.3 Clinical reasoning and differential diagnosis

☐☐☐ Clinical reasoning and differential diagnosis

13.4 Communicating with patients

☐☐☐ Communicating with patients

13.5 Medical ethics: autonomy, consent and confidentiality

☐☐☐ Medical ethics: autonomy, consent and confidentiality

13.6 Patient safety and quality

☐☐☐ Patient safety and quality

13.7 Public health and health systems

☐☐☐ Public health and health systems