

HOST DEFENSES 2008

Reading Assignments for Pathology

Textbook: *Pathologic Basis of Disease*, 7th Ed., Kumar, Abbas and Fausto

Week 1:

Topics: Cell injury, adaptations and cell death.
Kumar et al Chapter 1, pp. 4-37.

Week 2:

Topics: Acute inflammation.
Kumar et al Chapter 3, pp. 48-78.

Week 3:

Topics: Chronic inflammation.
Kumar et al Chapter 2, pp. 78-85; Chapter 6, pp. 216-217; Chapter 8, pp. 381-386.

Week 4:

Topics: Hypersensitivity reactions; Allograft and rejection.
Kumar et al Chapter 6, 205-222.

Week 5:

Topics: Thrombosis, hemostasis and shock.
Kumar et al Chapter 4, pp. 119-144.

Week 6:

Topics: Neoplasia.
Kumar et al Chapter 7, pp. 270-338.

Reading Assignments for Immunology

Textbook: "The Immune System, 2nd edition, Peter Parham, Garland Science

Week 1:

Topics: The overall immune system; Innate immune responses; The complement system.

Parham Chapter 1; Chapter 7, pp. 205-224; Chapter 8, 8.1-8.12, pp. 227-252.

Week 2:

Topics: B cell development, antibody structure, function and diversity.

Parham Chapter 2; Chapter 4; Chapter 7, 7.1-7.14, pp.181-205

Week 3:

Topics: T cell development and effector function; TCR and MHC, antigen recognition.

Parham Chapters 3, 5, 6; Chapter 8, 8.17-8.27, pp. 260-275.

Week 4:

Topics: Hypersensitivity reactions; Allograft and rejection.

Parham Chapter 10; Chapter 12, 12.9-12.25, pp. 391-412.

Week 5:

Topics: TNF and TNF Receptor Family of Molecules; IFN and Other Cytokines.

Parham Chapter 11, pp. 343-355.

Week 6:

Topics: Natural Killer Cells.

Parham Chapter 8, 8.13-8.16, pp. 252-257.

Week 7:

Topics: Tumor Immunology.

Parham Chapter 12, 12.26-12.39, pp. 412-430.

Reading Assignments for Microbiology

Textbook: Levinson, W.

Review of Medical Microbiology and Immunology, 10th Edition
McGraw-Hill

The (*) indicates chapters that cover specific organisms that you should learn about during the week. Note that the reading assignments are based on the 9th edition of the textbook and may change as a result of the new edition.

Week 1: Normal Flora/Basic Bacteriology (Structure, physiology & genetics)

Levinson Chapters: 1, 2, 3, 5, 6*, 9, 13

Week 2: Upper and Lower Respiratory Infections

Levinson Chapters: 3, 7, 15*, 19*, 23

Week 3: Bacterial Genetics and Drug Resistance/TB and related Chronic Infections.

Levinson Chapters: 4, 7, 10, 11, 12, 21*

Week 4: Wound infections and anaerobic bacteria

Levinson Chapters: 14*, 15*, 17*

Week 5: Bacteremia, the enteric bacteria in GI and GU infections

Levinson Chapters: 7, 8, 18*

Week 6: Sexually transmitted diseases, Introduction to Virology and viral pathogenesis

Levinson Chapters: 16*, 24*, 25*

Week 7: Mycology

Levinson Chapters: 47-50

Reading Assignments for Pharmacology

Main Katzung, Bertram G. Basic & Clinical Pharmacology, 10th edition, 2007-
textbook and Lange Medical Books/McGraw Hill

Review book: Supplementary review book: Lippincott's Illustrated Reviews,
Pharmacology, 3rd edition, Howland, RD, Mycek, MJ. 2006.

In some cases the same chapter in Katzung is assigned on more than one week—that is because the chapter addresses more than one topic. Please read the relevant parts for each week's subjects. Assigned reading is for Katzung. If you wish additional information, the Lippincott review may be useful.

Week 1

Topics: Dose Response & Selective Toxicity
Katzung Chapters 1 and 2

Week 2

Topics: Drug Absorption, Distribution and Excretion
 Drug Biotransformation
 Drug Interactions in Patients
Katzung Chapters 1, 2 and 4

Week 3

Topics: Antibiotics
 Responsible Prescribing
 Pharmacokinetics
Katzung Chapters 43-46, 66 and 3

Week 4

Topics: Pharmacokinetic analysis (conference/cases)
 Katzung Chapter 3

Week 5

Topics: Tolerance, Dependence and Withdrawal
 Review of Pharmacologic Principles (conference)
 Katzung Chapters 31 and 32
 Review chapters 1-4

Week 6

Topics: Anti-Neoplastic Drugs
 Anti-Viral Drugs
 Drug use in Pregnancy
 Katzung Chapters 55, 49 and 60

Week 7

Topics: Anti-Fungal Drugs
 How are Drugs Approved?
 Katzung Chapters 48 and 5

Pharmacologic Spotlights

The following lists the two drugs for which you will be responsible for learning the pharmacology in association with each PBL. Also listed are the chapters in Katzung in which you should look to find your information for each drug. Use the list “Key Categories of Pharmacologic Information” as a checklist for the categories you should consider.

Week 1 – The Baker’s Wound:

Drugs: Metformin (prototype biguanide)
 Glyburide (prototype sulfonylurea)
 (In Chapter 41).

Week 2 – Too Many Infections:

Drugs: Ampicillin (prototype beta-lactam antibiotic)
 (In Chapter 43)
 Phenobarbital (prototype CNS depressant)
 (In Chapter 24 and Chapter 22)

Week 3 – Mr. Tussis Persistent Cough:

Drugs: Isoniazid
 Rifampin (major drugs of different classes used for TB treatment)
 (In Chapter 47)

Week 4 – Mr Aches’ Joint Pain:

Drugs: Gentamicin (prototype aminoglycoside antibiotic)

(In Chapter 45)

Acetaminophen (prototype non-opiate analgesic)

(In Chapters 36 and 4)

Week 5 – The Distinguished Scientist:

Drugs: Ethanol (prototype CNS depressant)

(In Chapter 23).

Alprazolam (prototype benzodiazepine)

(In Chapter 22)

Week 6 – Mr. Enza's Respiratory Problem:

Drugs: Amantadine (prototype adamantane antiviral drug)

Oseltamivir (prototype neuraminidase inhibitor)

(In Chapter 49)