Basic Medical Biochemistry

Basic Medical Biochemistry: A Clinical Approach offers you a refreshingly different treatment of clinical chemistry. This excellent and well-written text provides a thorough, no nonsense approach to the science of biochemistry. It also addresses clinical relevance of the analytical procedures performed in the laboratory using case history presentations. This text will also serve as an outstanding desk reference for the practicing technologist.

Section A discusses: Fuel metabolism, and types of fuels; chemical and biological foundations of biochemistry, including acids, bases and buffers, amino acids, enzymes, cell biology, and chemical messengers; gene expression and the synthesis of proteins, covering structure of nucleic acids, DNA and RNA synthesis, regulation of gene expression, recombinant DNA techniques, and biology of cancer.

Section B discusses: Fuel oxidation and the generation of ATP, including bioenergetics, the tricarboxylic acid cycle, oxidative phosphorylation and mitochondrial function, glycosis, oxidation of fatty acids and ketone bodies, free radical injury, and metabolism of ethanol; carbohydrate metabolism, covering regulation of fuel metabolism by insulin, glucagon, and other hormones, digestion, absorption, and transport of carbohydrates, metabolism of glycogen, pentose phosphate pathway, glycoproteins and glycolipids, and maintenance of blood glucose levels; lipid metabolism, including digestion and transport, synthesis of fatty acids and the major membrane lipids, cholesterol metabolism, eicosanoids, and integration of carbohydrate and lipid metabolism.

Section C discusses: Nitrogen metabolism, including protein digestion and amino acid absorption, the urea cycle, synthesis and degradation of amino acids, folic acid and Vitamin B₁₂.

(continued on page 4)

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Also New:

Criminal Poisoning
... see p. 4
Practical Transfusion Medicine
... see p. 7
Combo... see p. 8

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For quickest results, fax your answer sheet...
see benefit on page 3

FREE course...
A course worth 1 or 2 contact hours is free for the asking with your order of 20 hours or more. You must request this free course, and it must be shipped along with your order.
See page 11 for details.
How the Immune System Works

In How The Immune System Works, the essential principles of the immune system are covered in humorous but informative “lectures” accompanied by clear illustrations. The author uses many examples to clarify the functions of each immune system component, as well as the interactions between immune system components. The author’s stated objective is to present a “concept driven analysis of how the immune system players work together to protect the host from disease, and why they do it this way.”

New features of this edition include new material on cancer and the immune system, expanded coverage of immune system regulation, and new chapters on “Turning Off the Immune System” and “Immunological Memory and Vaccines.”

Medical technologists will likely find some of the material presented in this book familiar. But research in the field of immunology yields new and exciting information on a daily basis, and the topics presented in this book will prove useful and informative even to those who have had formal coursework in immunology.

Chapters:
- The Innate Immune System
- B Cells and Antibodies
- The Magic of Antigen Presentation
- T Cells and Cytokines
- Lymphoid Organs and Lymphocyte Trafficking
- Turning Off the Immune System
- Tolerance Induction and MHC Restriction
- Immunological Memory and Vaccines
- Immunopathology: The Immune System Gone Wrong
- Cancer and the Immune System
- A Critique of the Immune System.

By Lauren Sompayrac, PhD / 3rd edition
Published by Blackwell Publishing in 2008
Soft cover / 134 pages / 2 lb
Meets the Florida 1-hour specialty requirement in serology/immunology.

12 contact hours (book and quiz) $62
Order code: IMMUNE08
Quiz-only if you already have the book $29

Book only (publisher’s price): $40
Food Safety

**Food Safety: Old Habits, New Perspectives** offers a fascinating anecdotal assessment of food- and waterborne illness “from farm to fork.” This book examines how modern technology and traditional views regarding food safety and food handling can affect consumer safety. Readers will become familiar with the history and causes behind many well-known outbreaks, including *Salmonella*, *E. coli* O157:H7, *Cryptosporidium*, norovirus, and “mad cow” disease.

The book is international in scope, providing information on food-borne outbreaks in other countries; it also traces the safety lapses and responsibilities contributing to a number of historical and modern food- and waterborne disease outbreaks.

Specific information about individual food-borne illnesses, including pathogenesis and factors contributing to these illnesses, are included in each chapter. Appendices detail the pathogens responsible for most food-borne illnesses.

Medical technologists will find this book fascinating reading, as well as a valuable addition to their reference libraries.

*By Entis, MSc SM(NRM) / Published by ASM Press in 2007 / Soft cover / 400 pages / 2 lb
Meets the Florida 1-hour requirement in microbiology.*

12 contact hours (book and quiz) $67
Quiz-only if you already have the book $29

**Book only (publisher’s price): $50**

Infections of Leisure

Many of us spend our leisure time hiking, boating, swimming, camping and gardening. We also like to sample new and trendy foods, pamper our pets and travel to far off places. These activities, however enjoyable they may be, expose us to a growing list of pathogenic microbes, some new and many increasingly resistant to current therapies. In response, the fourth edition of *Infections of Leisure* has been updated with the latest infectious threats, treatments and preventive measures. Three new chapters have been added to discuss and help manage the risks associated with air travel, petting zoos and cruise ships.

Each chapter focuses on the infectious risks associated with a particular type of leisure activity. At the end of each chapter, a list of *Practical Tips*, a new feature, has been added to emphasize the most critical steps needed to prevent and manage infections discussed in the chapter.

*Infections of Leisure* has been extensively updated and contains much new material. Clinical laboratory personnel, other health care professionals, and anyone engaging in leisure activities will find this book a valuable reference in assessing the risk of leisure-associated infections, taking measures to avoid these infections when possible, and in making informed choices.

*Section A* topics: At the Shore • Freshwater: from Lakes to Hot Tubs • The Camper’s Uninvited Guests • Infections in the Garden • Man’s Best Friend • Cats • Feathered Friends.

*Section B* topics: Less Common House Pets • Man’s Worst Friend: the Rat • Closed Due to Rabies • Sports • Traveling Abroad • From Boudoir to Bordello: STDs and Travel • Infections from Body Piercing and Tattoos • Infectious Diseases at High Altitude • Infectious Risks of Air Travel • Perils of the Petting Zoo • Infections on Cruise Ships • and Exotic and Trendy Cuisine.

*Edited by Schlossberg / 4th edition / Published by ASM Press (American Society for Microbiology) in 2009 / Soft cover / 408 pages plus index / 3 lb
Meets the Florida 1-hour specialty requirement in microbiology.*

12/12 contact hours (book and 2 quizzes, each worth 12 contact hours) $114
Order code: LEISURE0912AB
Both quiz packets: $48
Order code: LEISURE0912AB quiz-only
One quiz: $29
Order code: LEISURE0912A or B quiz-only

**Book only (publisher’s price): $70**
Criminal Poisoning

This text is a comprehensive study of criminal toxicology that presents information about unique poisons not discussed in other books.

Section A of the course begins with introductory material about the history of criminal poisoning, poisoners and their relationship with their victims, and the procedure for evaluating a potential criminal poisoning. This is followed by comprehensive coverage of specific poison vectors/agents: acids and alkalis, animals (as vectors), arsenic, botulism, cyanide, dioxin, drugs of abuse, gamma-hydroxybutyrate, hypoglycemics, neuromuscular blocking agents, opioids, and organophosphates.

Section B continues the discussion of specific poisons: plants and herbs, potassium, quinuclidinyl benzilate, saxitoxin, sedative-hypnotics, sodium monofluoroacetate, strychnine, thallium, toxalbumins, and triothecene mycotoxins. The section ends with discussions about medical serial killers, Munchhausen by proxy, and drug-facilitated sexual assault.

The chapters discussing specific poison agents/vectors each begin with a case study of an actual poisoning, and continue with information regarding the history of the drug, routes of exposure or administration, toxicologic mechanisms, clinical effects, and laboratory testing.

Of timely significance is the fact that many of these agents/vectors are potential terrorist weapons that, in some cases, have been used recently in well-publicized instances of poisoning.

By Holstege, MD, et al. / Pub. by Jones and Bartlett in 2011 / Hard cover / 234 pp plus glossary, index, and photos / 3 lb / Meets the Florida 1-hour requirements in clinical chemistry and microbiology.

12/12 contact hours (book and 2 quizzes, each worth 12 contact hours) $140
Order code: CRIM1112AB
Both quiz packets $48
Order code: CRIM1112AB quiz-only
Book only (publisher’s price): $108

Basic Medical Biochemistry

(continued from cover)

purine and pyrimidine metabolism, and intertissue relationships in the metabolism of amino acids; tissue metabolism, including actions of hormones, biochemistry of erythrocytes and other blood cells, plasma proteins, coagulation, fibrinolysis, liver function, metabolism of muscle, metabolism of the nervous system, and biochemistry of connective tissue.

By Lieberman, PhD, et al. / 3rd edition
Pub. by Lippincott, Williams & Wilkins in 2009
Soft cover 953 pages plus index / 7 lb
Each section meets the Florida 1-hour requirement in clinical chemistry.

(continued at top of next column)
Bailey & Scott’s Diagnostic Microbiology

From gram stain to real-time PCR, Bailey & Scott’s Diagnostic Microbiology provides you with practical but authoritative information necessary for all areas (diagnostic bacteriology, virology, serology, mycology, and parasitology) of the full-service clinical microbiology laboratory. This edition includes updated information on many changes that have occurred in diagnostic techniques, emerging pathogens, taxonomies, and therapeutic agents.

Our study guide is written by an experienced clinical microbiologist.

Section A covers basic tools, from microscopy to nucleic acid-based methods, as well as the evaluation of antimicrobial activity. It then reviews the gram-positive bacteria and Enterobacteriaceae.

Section B completes the review of medical bacteria (including nonferms, anaerobes, mycobacteria, and many other groups) and goes on to cover parasitology.

Section C covers mycology and virology. It also reviews the normal flora and usual pathogens associated with different organ systems (from oral cavity to GI tract). There are also chapters on laboratory management, QC, infection control, and bioterrorism agents.

By Forbes, PhD, et al. / 12th edition
Published by Mosby Elsevier in 2007
Hard cover / 957 pages plus appendix and index / 9 lb
Each section meets the Florida 1-hour specialty requirement in microbiology. Section A also meets the serology/immunology requirement, while Section C meets the administration/supervision requirement.

12/12/12 contact hours (book and 3 quizzes, each worth 12 contact hours) $151
Order code: MICRO0712ABC
12/12 contact hours (book and 2 quizzes) $136
Order code: MICRO0712AB or BC or AC
Quiz-only if you already have the book:
All three quizzes: $72
Order code: MICRO0712ABC quiz-only
Two quizzes: $48
Code: MICRO0712AB or BC or AC quiz-only
One quiz: $29
Code: MICRO0712A or B or C quiz-only

Book only (publisher’s price): $113

Molecular Diagnostics

Techniques of molecular biology have only recently been integrated into the clinical laboratory. Most medical technologists will not have had any formal training or experience in the area of molecular diagnostic medicine, yet may be involved in molecular-based testing techniques. This course will provide them with an opportunity to learn about this exciting field of study and fill a critical gap in their laboratory training.

Molecular Diagnostics: Fundamentals, Methods, and Clinical Applications is an excellent, up-to-date textbook. The course consists of three sections.

Section A details the basics of molecular biology: DNA • RNA • Proteins • Common Techniques in Molecular Biology • Resolution and Detection of Nucleic Acids • and Analysis and Characterization of Nucleic Acids and Proteins.

Section B examines: Nucleic Acid Amplification • Chromosomal Structure and Chromosomal Mutations • Gene Mutations • DNA Sequencing • and DNA Polymorphisms and Human Identification.

Section C describes: Detection and Identification of Microorganisms • Molecular Detection of Inherited Diseases • Molecular Oncology • DNA-based Tissue Typing • Quality Assurance and Quality Control in the Molecular Laboratory.

By Buckingham, PhD, and Flaw, PhD
Published by F. A. Davis in 2007
Soft cover / 462 pages / 3 lb
Sections A and B meet the Florida 1-hour specialty requirements in microbiology, chemistry, cytology, and molecular pathology. Section C also meets the histology requirement.

12/12/12 contact hours (book and 3 quizzes, each worth 12 contact hours) $130
Order code: MOLEC0712ABC
12/12 contact hours (book and 2 quizzes) $110
Order code: MOLEC0712AB or BC or AC
Quiz-only packets if you already have the book:
All three quizzes: $72
Order code: MOLEC0712ABC quiz-only
Two quizzes: $48
Code: MOLEC0712AB or BC or AC quiz-only
One quiz: $29
Code: MOLEC0712A or B or C quiz-only

Book only (publisher’s price): $65
Legal Aspects: California

*Legal Aspects of California Clinical Laboratory Practice* is a guide to the California laws governing your clinical laboratory practice. It gathers these laws from their various sources—the Business and Professions Code, Health and Safety Code, and Titles 17 and 22 of the Code of California Regulations—and then explains them in English. This course is updated as laws and regulations are changed.

You’ll read about the laws that govern: Scope of practice of clinical laboratory personnel, including phlebotomist certification requirements and medical technician licensing • How certain tests must be performed and under what conditions • Reporting test results • Regulation of clinical laboratories • Removal of licenses • Consents • Medical records • Malpractice.

By Robert D. Anderson, Attorney-at-Law
Course up-to-date as of February 2011
127 pages / 2 lb
Approved only for California licensees

6 contact hours (rdg material and quiz) $37
Order code: CACLPL11
Quiz-only packet: $21
Order code: CACLPL11 quiz-only.
Course may be completed online.

Legal Aspects: Florida

This guide to the Florida laws governing your clinical laboratory practice is updated each time the Board of Clinical Laboratory Personnel changes its regulations or the State Legislature changes the laws. Being aware of these laws can help ensure your compliance with regulatory requirements and help you and your subordinates avoid problems with governmental agencies, accreditation bodies, and malpractice liability.

In *Legal Aspects of Florida Clinical Laboratory Practice*, you’ll read about the laws that govern: Scope of practice of clinical laboratory personnel • How certain tests must be performed and reported • Regulation of clinical laboratories • Removal of licenses • Medicare fraud • Consents • Malpractice.

By Robert D. Anderson, JD / Course up-to-date as of February 2011 / 147 pgs / 2 lb

Meets the Florida 1-hour administration/supervision requirement and the requirement for a 1-hour course on Florida laws and rules governing clinical laboratory personnel. *(Course includes 2FLCLP11 so please don’t order both.)*

Approved only for Florida licensees

10 contact hours (book and quiz) $42
Order code: FLCLP1110
Quiz-only packet: $29
Order code: FLCLP1110 quiz-only.
Course may be completed online.

Understanding CLIA ’88

On January 24, 2003, the latest CLIA regulations were published. The changes included a major reorganization and consolidation of the regulations by basing requirements on the flow of a patient specimen through the laboratory.

Designed for laboratory directors and supervisors, this course presents the CLIA regulations in plain English. The course is meant to provide critical information to ensure compliance with the regulations and should be most helpful in preparing for a CLIA survey.

This newly revised edition now contains *all* surveyor guidelines which explain how surveyors apply the regulations in the context of clinical laboratory settings. It also contains more than 30 new summaries of cases in which laboratories lost their licenses for deficient practices in proficiency testing, quality control and quality assurance, and other areas.

By Robert D. Anderson, JD / 2nd edition, Version 2 / Published by Anderson Continuing Education in 2007 / Loose-leaf spiral binding
300 pages / 5 lb
Each section meets the Florida 1-hour requirement in administration/supervision.

The course worth 25 contact hours is for Florida medical technologists who wish to upgrade to supervisor. (Please note that if you use this course for the supervisor upgrade, Florida will not accept it for your regular license renewal.)

12/12 contact hours (book and 2 quizzes, each worth 12 contact hours) $82
Order code: CLIA0712AB
25 contact hours (book and one quiz worth 25 contact hours) $82
Order code: CLIA0725

Quiz-only packets if you already have the book but have not used it for credit:
Both quizzes or 25-hour quiz: $48
Code: CLIA0712AB quiz-only
One quiz (12 hours): $29
Code: CLIA0712A or B quiz-only

Book only: $45

Benefit

In a hurry?
We can e-mail any quiz, along with a Scantron answer sheet. Please order by phone. You’ll save shipping as well as time.

We also have a growing list of courses online.
Practical Transfusion Medicine

Practical Transfusion Medicine, a 2010 winner of the British Medical Association Medical Book Awards, is divided into 49 chapters, written in a friendly, accessible, concise and easy style intended to provide a comprehensive view of all aspects of transfusion medicine and allied fields. The chapters are written by practicing clinicians, researchers and healthcare professionals who procure, produce and test blood components, cells and tissues and by those who use them and have to trace them to their final destinations. The authorship of this book is international, with the majority of contributors hailing from England and Scotland. The reader will note extensive discussion of clinical practices and regulatory issues in these countries in many of the chapters, and will also note the British spelling of many of the words.

The text has expanded to seven parts. The first takes the reader systematically through the principles of transfusion medicine, while the second covers complications which arise in transfusions (Section A quiz). It’s followed by a third part on the practice of transfusion in blood centers and hospitals; the fourth covers clinical transfusion practice (Section B quiz). The final parts look at alternatives to transfusion, cellular and tissue therapy, organ transplantation, and the development of the evidence base for transfusion (Section C quiz).

This book is recommended for those already involved in blood services and transfusion medicine as well as those entering the field and who have to make important decisions about patient care. The book should prove to be a valuable resource to medical technologists working in the immunohematology/blood bank laboratory, as well as to those in other areas of the laboratory who wish to learn more about transfusion medicine.

Edited by Murphy, MD, FRCP, FRCPPath, et al. Third edition / Published by Wiley-Blackwell in 2009
Hardcover / 555 pages / 6 lb
Each section meets the Florida 1-hour requirement in immunohematology. Section A also meets serology/immunology and bacteriology. Section B also meets supervision/administration and hematology. Section C also meets the hematology requirement.

12/12/12 contact hours (book and 3 quizzes, each worth 12 contact hours) $190
Order code: TRANS0912ABC
12/12 contact hours (book and 2 quizzes) $170
Order code: TRANS0912AB or BC or AC

Quiz-only packets if you already have book:
All three quizzes: $72
Order code: TRANS0912ABC quiz-only
Two quizzes: $48
Code: TRANS0912AB or BC or AC quiz-only
One quiz: $29
Code: TRANS0912A or B or C quiz-only

Book only (publisher’s price): $158

Anderson Continuing Education

Anderson Course Approvals/Acceptance

California —
Anderson Continuing Education is an approved accrediting agency with the California Department of Public Health, Accrediting Agency Registration #0120.

Florida —
Anderson Continuing Education is approved as a provider of continuing education by the Board of Clinical Laboratory Personnel, Division of Medical Quality Assurance, Florida Agency for Health Care Administration, Provider #50-2211.

Louisiana —
Anderson Continuing Education is approved as a Provider of continuing education programs in the clinical laboratory sciences by the Clinical Laboratory Personnel Committee to The Louisiana State Board of Medical Examiners, providership number CLPC#00030.

Nevada —
Nevada accepts Anderson courses.

NCA —
Anderson Continuing Education is approved as a Provider of continuing education programs in the clinical laboratory sciences by the American Society for Clinical Laboratory Science (ASCLS) Professional Acknowledgment for Continuing Education (P.A.C.E.) Program. All courses are intermediate level unless otherwise indicated.

American Medical Technologists —
AMT accepts courses that have been approved by P.A.C.E.

American Society for Clinical Pathology —
ASCP accepts courses that have been approved by P.A.C.E.

Montana, North Dakota, Rhode Island, Tennessee and W. Virginia —
These states accept courses that have been approved by P.A.C.E.

NEW

Practical Transfusion Medicine

Edited by Murphy, MD, FRCP, FRCPPath, et al.
Third edition / Published by Wiley-Blackwell in 2009
Hard cover / 555 pgs / 6 lb
Each section meets the Florida 1-hour requirement in immunohematology. Section A also meets serology/immunology and bacteriology. Section B also meets supervision/administration and hematology. Section C also meets the hematology requirement.

12/12/12 contact hours (book and 3 quizzes, each worth 12 contact hours) $190
Order code: TRANS0912ABC
12/12 contact hours (book and 2 quizzes) $170
Order code: TRANS0912AB or BC or AC

Quiz-only packets if you already have book:
All three quizzes: $72
Order code: TRANS0912ABC quiz-only
Two quizzes: $48
Code: TRANS0912AB or BC or AC quiz-only
One quiz: $29
Code: TRANS0912A or B or C quiz-only

Book only (publisher’s price): $158
Florida Licensees: Meet Your Specialty Requirements...

These courses are designed to satisfy the Florida requirement to obtain one hour in each license specialty; however, all of our customers may take these courses.

The reading material for each of these courses is a chapter from *Clinical Laboratory Science: The Basics and Routine Techniques*, 6th Edition. The publisher has granted us the right to reproduce them. These courses offer clear basic material for beginning technologists and convenient refreshers for experienced ones. They may be completed online.

1. “Introduction to Microbiology”  
2 contact hours

This course includes discussions of bacterial growth, colony characteristics, oxygen requirements, various types of culture media, and biochemical testing; also included is a presentation of the identification and diagnosis of fungi and fungal infections, concluding with material related to parasites and parasitic infections.

Published by Elsevier in 2011 / 21 pgs / 1 lb  
Meets the Florida 1-hour requirement in microbiology.  
Order code: 2MICRO11 / $17

2. “Immunology and Serology”  
2 contact hours

Topics include the immune system and types of immunity; immunoglobulins; types of laboratory assays; pregnancy testing; diagnostic techniques and characteristics related to infectious mononucleosis, systemic lupus erythematosus, Sjögren’s syndrome, rheumatoid arthritis, and syphilis.

Published by Elsevier in 2011 / 20 pages / 1 lb  
Meets the Florida 1-hour requirement in serology/immunology.  
Order code: 2SEROL11 / $17

3. “Introduction to Clinical Chemistry”  
2 contact hours

You’ll read about selected electrolytes, osmolality, anion gap, electrolyte imbalance, excretion of nitrogen compounds, hepatobiliary disease, the origin and nature of neonatal jaundice, pancreatic disease, and tumor markers associated with specific diseases.

Published by Elsevier in 2011 / 23 pages / 1 lb  
Meets the Florida 1-hr clinical chemistry requirement.  
Order code: 2CHEM11 / $17

4. “Principles and Practice of Clinical Hematology”  
2 contact hours

Topics include microscopy of the peripheral blood film, including both normal and pathological morphology of erythrocytes and leukocytes, a discussion of anemias, the sex chromatin, leukemias, and the Philadelphia chromosome.

Published by Elsevier in 2011 / 22 pages / 1 lb  
Meets the Florida 1-hour requirement in hematology.  
Order code: 2HEMA11 / $17

5. “Immunohematology and Transfusion Medicine”  
2 contact hours

Read about donor criteria and blood collection anticoagulants and preservatives, as well as testing required on donated units; autologous transfusions, whole blood and the use of components; ABO genotypes including detection of the A₁ subgroup; special problems related to newborns; universal donors/recipients; the Rh system and specific Rh antisera; other blood group systems.

Published by Elsevier in 2011 / 20 pgs / 1 lb  
Meets the Florida 1-hour requirements in immunohematology and blood bank/donor processing.  
Order code: 2IMMUNOHEMA11 / $17

All 5 Major Florida Specialties

This course is a combination of the five courses you see on this page. It meets all five major Florida specialties.

- 106 pages / 2 lb / Meets the specialty requirements in microbiology; serology/immunology; clinical chemistry; hematology; and immunohematology and blood bank/donor processing.
- 10 contact hours (book and quiz) $48  
Order code: 10COMBO11  
Quiz-only packet if you already have book: $29  
Order code: 10COMBO11 quiz-only
Sample ways for Florida clinical laboratory personnel (including supervisors) to meet all of their license renewal requirements

Package 1  
$100 plus shipping  
(total weight is 3 lb)  
10-hr Florida Law ($42) p. 6  
10-hr Combination of five major specialties ($48) p. 8  
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2-hr Medical Errors (free)  

Quiz-only packets: $66, 2 lb  
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10-hr Combination of five major specialties ($48) p. 8  
1-hr Molec. Path. ($10) p. 14  
2-hr AIDS ($10) p. 11  
2-hr Medical Errors (free) p.11  

Quiz-only packets: $69, 2 lb  
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Package 3  
12-hr How the Immune System Works ($62) p. 2  
10-hr Combination of five major specialties ($48) p. 8  
2-hr Florida Law ($10) p. 11  
1-hr AIDS ($10) p. 11  
2-hr Medical Errors (free) p.11  

Quiz-only packets: $69, 2 lb  
Order code: Pkg 3, quiz only

Package 4  
12-hr Food Safety ($67) p. 3  
10-hr Combo ($48) p. 8  
2-hr Florida Law ($10) p. 11  
1-hr AIDS ($10) p. 11  
2-hr Medical Errors (free)  

Quiz-only packets: $69, 2 lb  
Order code: Pkg 4, quiz only

Package 5  
20-hr Pathology for the Health Professions ($115) this page  
2-hr Medical Errors (free) p.11  
1-hr AIDS ($10) p. 11  
2-hr Florida Law ($10) p. 11  

Quiz-only packets: $66, 2 lb  
Order code: Pkg 5, quiz only

With the exception of the legal courses on pages 6 and 11, all of our customers may take any course listed in this catalog.

Pathology

Pathology for the Health Professions offers you a refreshingly different and practical approach to the subject of pathology. This text will serve as an outstanding desk reference for the practicing technologist and technician.

The text was specifically written for students in the allied health professions. While useful for practicing histology technicians, it also provides a concise and clinically-relevant overview of general pathology that will be of general interest and professional value for medical technologists working in all areas of the clinical laboratory. The text is arranged in two broad areas: basic pathologic processes, followed by an extensive and detailed discussion of each organ system; the book can best be described as a study of dynamic clinical pathology. Photographs and illustrations abound.

What’s new?
- 16 new topics, including Job’s syndrome, HeLa, H1N1, Pneumonia-causing fungus, Chronic Lymphocytic Leukemia (CLL), Rotavirus and Norovirus, HPV vaccination, and more.
- 18 additional Did You Know boxes provide interesting stories and curious facts about various disorders.

Table of Contents:
Section A: Cell pathology, inflammation, immunopathology, neoplasia, genetic and developmental disorders, fluid and hemo-dynamic disorders, the cardiovascular system, the respiratory system, the hematopoietic and lymphoid systems.

Section B: The gastrointestinal system, the liver and biliary system, the pancreas, the urinary tract, the male reproductive system, the female reproductive system, the breast, the endocrine system, the skin, bones and joints, muscles and peripheral nerves, the nervous system, the eye, the ear.

By Damjanov, MD, PhD / 4th edition
Published by Elsevier Saunders in 2012
Soft cover / 489 pgs plus hundreds of illustrations, the glossary, and the index / 5 lb
Each section meets the Florida 1-hour requirement for hematology, microbiology, serology/immunology, histology, cytology, and molecular genetics.

10/10 contact hours (book and 2 quizzes, each worth 10 contact hours) $115  
Order code: PATH1210AB  
Both quiz packets $48  
Order code: PATH1210AB quiz-only  
One quiz packet: $29  
Order code: PATH1210A or B  
Book only (publisher’s price): $83
Clinical Hematology


Three quizzes, each worth 12 contact hours, accompany this book.

Section A (Chapters 1-14):
Part 1, Introduction to Clinical Hematology: morphology • hematopoiesis • bone marrow • diagnosis and clinical considerations of anemia • evaluation of cell morphology. Part 2, Anemias: hypochromic • megaloblastic • aplastic • hemolytic—intracorpuscular defects • hereditary enzyme deficiencies • hemoglobinopathies • thalassemia • hemolytic—extracorpuscular defects • hypoproliferative.

Section B (Chapters 15-25):
Part 3, White Blood Cell Disorders: cell biology • disorders of neutrophils • infectious mononucleosis • reactive lymphocytosis • acute leukemias • chronic myeloproliferative disorders • chronic myelogenous leukemia • polycythemia vera • essential thrombocythemia • idiopathic myelofibrosis • myelodysplastic syndromes • chronic lymphocytic leukemia • lymphomas • multiple myeloma and related plasma cell disorders • lipid storage diseases • histiocytosis. Part 4, Hemostasis and Introduction to Thrombosis: disorders of primary hemostasis.

Section C (Chapters 26-36):
Part 4, Hemostasis and Introduction to Thrombosis, continued: disorders of plasma clotting factors • fibrinolytic, coagulation and kinin systems • DIC • thrombosis and anticoagulant therapy. Part 5, Laboratory Methods: quality management • quality assurance • quality control • analysis of serous, cerebrospinal, and synovial fluids • hematology methods • automated differential analysis • coagulation methods • flow cytometry • molecular diagnostic techniques • special stains/cytochemistry.

By Harmening, PhD, MT(ASCP), CLS(NCA) / 5th edition / Published by F.A. Davis Company in 2009
Hard cover / 949, plus glossary and index / 8 lb

12/12/12 contact hours (book and 3 quizzes, each worth 12 contact hours) $162
Order code: HEMAO912ABC
12/12 contact hours (book and 2 quizzes) $142
Order code: HEMAO912AB or BC or AC

Quiz-only if you already have the book:
All three quizzes: $72
Order code: HEMAO912ABC quiz-only
Two quizzes: $48
Code: HEMAO912AB or BC or AC quiz-only
One quiz: $29
Code: HEMAO912A or B or C quiz-only

Book only (publisher’s price): $114

Immunology and Serology

The purpose of Immunology and Serology in Laboratory Medicine is to describe the basic concepts of immunology, to elucidate the underlying theories of procedures performed in the clinical laboratory, to summarize clinical features and present case studies of selected infectious diseases and autoimmune disorders, and to discuss concepts of transplantation and tumor immunity.

The major topics are organized into four sections; the first two sections (Section A quiz) provide foundational knowledge that progresses from basic immunologic mechanisms and serologic concepts to the theory of laboratory procedures including molecular techniques. The latter two sections (Section B quiz) emphasize medical applications of importance to clinical laboratory science, addressing representative disorders of infectious and immunologic origin, as well as topics related to transplantation and tumor immunology.

This new edition expands information related to inflammation and T cell lymphocytes in Section I. Section II adds new chapters on quality assessment, point of care testing, and chapters on laboratory safety, basic laboratory techniques, and molecular techniques have been expanded. Chapter 16, A Primer on Vaccines, has been added as the importance of vaccines continues to become evident. Section IV presents the latest information related to transplantation, and knowledge related to tumor immunology has been expanded.

Although this book is intended for use by clinical laboratory technician and clinical laboratory science students as a text in beginning serology/immunology, practicing medical technologists will find the book useful as a reference.

By Mary Louise Turgeon, EdD, MT(ASCP), CLS(NCA) / Published by Mosby Elsevier in 2009
Hard cover / 480 plus appendices and index / 5 lb
Meets the Florida 1-hour requirement in serology/immunology.

12/12 contact hours (book and 2 quizzes, each worth 12 contact hours) $114
Order code: IMMUNO912AB
Both quiz packets: $48
Order code: IMMUNO912AB quiz-only
One quiz: $29
Order code: IMMUNO912A or B quiz-only

Book only (publisher’s price): $73
Laboratory Management

In most instances, courses in laboratory management focus on such things as diversity issues, workload recording, employee scheduling, team building, workflow, and performance evaluations; indeed, these are all a part of managing a laboratory. While knowledge of how these functions are supposed to work is important as background information, applying the knowledge in day-to-day operations may meet with limited success because many of the necessary decisions are, in fact, made by someone other than the laboratory manager or supervisor.

This current course represents more of a clinical laboratory approach and less of a strictly management approach; the goal is to address everyday, real challenges that confront the manager or supervisor. Topics covered in this course are those that staff medical technologists or departmental supervisors frequently are too busy to deal with, yet the pathologist and the administrator have expectations that someone in the lab is dealing with; that someone is, by default, the laboratory manager or supervisor.

This course consists of selected chapters that have been copied with the publisher’s permission from *Henry’s Clinical Diagnosis and Management by Laboratory Methods*. Topics that will be presented in depth include: general concepts and administrative issues; point-of-care and physician office laboratories; post analysis—medical decision making; laboratory statistics; quality control; financial management; biological, chemical, and nuclear terrorism; role of the laboratory; bioterrorism; microbiology; establishing a molecular diagnostics laboratory.

Note: This text has tiny print.

By McPherson, MD, and Pincus, MD, PhD (Eds) 21st edition / Published by Elsevier Saunders in 2007 / Complete text is hard cover, containing 1,450 pages, incl. appendix and index. This course consists of 94 pages copied from this text / 2 lb Each section meets the Florida one-hour administration/supervision requirement. Together, Sections A and B satisfy the Florida requirement to earn 25 contact hours in administration/supervision to upgrade a license from Medical Technologist to Supervisor.

12/13 contact hours (book and 2 quizzes: Section A is worth 12 contact hours; Section B is worth 13 contact hours) $87 Order code: MANAGE0725AB Both quiz packets: $48 Order code: MANAGE0725AB quiz-only One quiz packet: $29 Order code: MANAGE0712A quiz-only or MANAGE0713B quiz-only

Course may be e-mailed to you. Order by phone.

FREE Course!

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*You must request your free course when you order as we do not automatically send one. Enter the code on the order form. This course is free only if shipped in the same package as your order. Not transferable.

HIV/AIDS

The 1-hour HIV/AIDS course describes the nature of the disease and provides information on laboratory tests, including the rapid formats that have revolutionized testing. The 2-hour option provides a little more technical detail.

Published by Anderson in 2011.

1 contact hour. Order code: 1AIDS11 or
2 contact hours. Order code: 2AIDS11

Medical Errors

This course addresses errors made in the preanalytic, analytic, and postanalytic phases of laboratory testing.

2 contact hours
Published by Anderson in 2011.
Order code: 2MEDERR11

Note: Everyone may take the AIDS and medical errors courses and get credit for them. Also, if you’re ordering one of the packages, the free AIDS or medical error courses are already included within each package.

Florida CLP Law

*Florida Clinical Laboratory Personnel Law* is a concise explanation of the current regulations of the Board of Clinical Laboratory Personnel. Includes: Scope of practice • Responsibilities of each level of licensure • Removal of licenses. Course is updated each time the Board changes its regulations.

2 contact hours / By Robert D. Anderson, JD Course up-to-date as of February 2011 / 25 pgs Meets the FL 1-hour administration/supervision requirement and the requirement for a 1-hour course on the FL laws and rules governing CLPs. Order code: 2FLCLP11 Approved only for Florida licensees.

Separately, courses are $17 each. Add 1 lb s/h. Order 20 hours, first course above is free, others are $10 each (no s/h) / Quiz-only: $13 (no s/h) Courses may be completed online.
**Histological and Histochemical Methods**

Although *Histological and Histochemical Methods: Theory and Practice* was written specifically for practicing histology technologists, it is a sourcebook that will be found very useful by technologists in the departments of hematology (Wright and Giemsa stains), microbiology (Gram stain), and cytology (PAP stain). For example, cyto technologists will find explanations of the physical chemistry and biochemistry of the components of the stains used in the PAP technique, along with the complete procedure for the staining and a thorough explanation of the appearance of various kinds of cells based on their stain uptake.

The final chapter entitled “Miscellaneous Data” contains detailed recipes for a wide variety of commonly used stock buffer solutions, as well as for physiological solutions such as normal saline and Ringer-Locke solution. This chapter includes a list of mammalian tissues that may be used as positive controls for a large number of varied histochemical reactions.

**Section A** topics: Introduction to microtechnique • fixation • decalcification and other treatments for hard tissues • processing and mounting • dyes • histological staining in one or two colors.

**Section B** topics: Staining blood and other cell suspensions • methods for connective tissue • methods for nucleic acids • organic functional groups and protein histochemistry • carbohydrate histochemistry • lipids • methods for inorganic ions.

**Section C** topics: Enzyme histochemistry: general considerations • hydrolytic enzymes • oxidoreductases • methods for soluble organic compounds of low molecular weight • metal reduction and precipitation methods • immunohistochemistry.

By Kiernan / 4th edition / Published by Scion Publishing in 2008 / Soft cover 533 pages plus indexes / 3 lb
Each section meets the Florida 1-hour requirement in histology. 12/12 contact hours (book and quiz) $147
Order code: HIST0812ABC
12/12 contact hours (book and 2 quizzes) $132
Order code: HIST0812AB or BC or AC

**Quiz-only if you already have the book:**
All three quizzes: $72
Order code: HIST0812ABC quiz-only
Two quizzes: $48
Code: HIST0812AB or BC or AC quiz-only
One quiz: $29
Code: HIST0812A or B or C quiz-only

**Book only (publisher’s price): $75**

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**Phlebotomy Essentials**

In order to collect blood and other nonblood-related samples for laboratory analysis, professionals need to have a thorough understanding of the principles, techniques, and procedures involved. This excellent text was written specifically for phlebotomists and any healthcare professional involved with the collection of blood samples and other nonblood-related samples for laboratory analysis.

**Section A** subjects include: Phlebotomy and the healthcare setting • quality assurance and legal issues • infection control and safety • medical terminology • review of human anatomy and physiology • the human circulatory system (arterial, venous, and lymphatic) • blood collection equipment, additives, and order of the draw.

**Section B** subjects include: Venipuncture procedures • preanalytical considerations • capillary puncture equipment and procedures • special procedures and point-of-care testing • arterial punctures • nonblood specimens • specimen handling and processing • laboratory mathematics.

By McCall, MT(ASCP), and Tankersley, MT(ASCP) / 4th edition / Published by Lippincott Williams & Wilkins in 2008 / Soft cover / 540 pages, including glossary and appendixes and index / 3 lb
12/12 contact hours (book and quiz) $98
Order code: PHLEB0812AB
Both quiz packets: $48
Order code: PHLEB0812AB quiz-only
One quiz: $29
Order code: PHLEB0812A or B quiz-only

**Book only (publisher’s price): $64**
Revenge of the Microbes
How Bacterial Resistance is Undermining the Antibiotic Miracle

“What is antibiotic resistance and why should I be concerned with it?” Media coverage, political and scientific discussions about “superbugs” that defy conventional treatment, the threat of bioterrorism, and use of antibiotics in agriculture have increased awareness and fears regarding antibiotic resistance. This book is a single source of answers to these and other questions.

Written by experts with extensive experience in the field, Revenge of the Microbes provides scientific information on topics affecting the use of antibiotics such as economics, politics, health, safety and the environment. Specific antibiotics and controversies are examined in a real life context, accounts of positions on all sides of the public policy debate are presented, and less common issues, such as what happens to antibiotics once they are released into the environment, are discussed. The evolution of antibiotic-resistant bacteria is put into perspective, and bacterial mutation and horizontal gene transfer are explained in simple terms.

Revenge of the Microbes encourages readers to consider the extensive role of antibiotics in modern medicine and the potentially catastrophic impact the loss of effective antibiotics might have on today’s and on future generations.

Note: This text requires readers to have at least a basic knowledge of microbiology.

Chapters: Magic Bullets, Miracle Drugs • A Brief Look at the History of Antibiotics • Bacteria Reveal their Adaptability, Threatening the Brief Reign of Antibiotics • Antibiotic-Resistant Bacteria in the News • Antibiotics That Inhibit Bacterial Cell Wall Synthesis • Antibiotics That Inhibit the Synthesis of Bacterial Proteins • Fluoroquinolones, Sulfas, and Antituberculosis Drugs • Bacterial Promiscuity: How Bacterial Sex Contributes to Development of Resistance • The Looming Crisis in Antibiotic Availability • Antiseptics and Disinfectants • Antiviral, Antifungal, and Antiprotozoal Compounds.

By Salyers and Whitt, both of University of Illinois
Published by ASM Press in 2005
Soft cover / 186 pages / 2 lb
Meets the Florida 1-hour requirement in microbiology.

12 contact hours (book and quiz) $52
Order code: MICROBES05
Book only (publisher’s price): $30

Phlebotomy Essentials
(6 contact hours)

Written specifically for phlebotomists, Phlebotomy Essentials is applicable to those who are just entering the field, as well as to those who have been active in the field for many years.

Subjects covered: Review of human anatomy and physiology • the human circulatory system (arterial, venous, and lymphatic), including the various types of cells circulating in the blood and the partition between cells and plasma • and preanalytical considerations, including fasting, stress, fever, and mastectomy.

This course was designed specifically for phlebotomists licensed in California or Louisiana. No credit will be granted to medical technologists/clinical laboratory scientists.

By McCall, MT(ASCP), and Tankersley, MT(ASCP)
4th edition / Published by Lippincott Williams & Wilkins in 2008 / This course consists of 85 pages from this text / 1 lb
Meets the California requirement in phlebotomy (3 contact hours per year for two years).

6 contact hours (reading material and quiz) $30
Order code: PHLEB08
Quiz-only packet if you already have book but have not yet used it for credit: $21
Order code: PHLEB08 quiz-only
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• 36 contact hours: $72

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Please note: Those who order quiz-only packets are entitled to one of the free courses, but please add 1 lb shipping.
Mad Cow and Other Prion Diseases, 2007 Update

Prion diseases are among the most devastating, costly, and controversial emerging infections. The best known is BSE, or “mad cow disease,” which devastated the British meat industry when about 160 human fatalities occurred as a result of ingestion of prion-infected beef. BSE has now been reported in a few U.S. animals. Other prion diseases are widespread in U.S. wildlife. This updated summary describes the biology of the infectious protein, or prion, which causes these diseases. It discusses how the prospects of safeguarding our food and blood supply are hampered by insensitive laboratory tests, critically reviews claims made by government agencies about the safety of beef and other foods, and describes some promising new approaches to testing.

By Smith, MPH, M(ASCP) / Pub. by Anderson Continuing Education in 2007 / 15 pgs / 1 lb
Meets the Florida 1-hour requirements in microbiology, molecular pathology, and histology.

3 contact hours (reading material and quiz) $21
Order code: 3PRIONS07
Quiz-only if you already have book: $13 (incl s/h)
Course may be completed online.

Blood Gases

Read about formulas concerning the general laws that define the behavior of gases, the Henderson-Hasselbalch equation as it applies to blood gases, hemoglobin-oxygen binding and saturation, oxygen dissociation curves, P50 and its clinical significance, and the formula used in tonometry.

This is part of a chapter from Tietz Fundamentals of Clinical Chemistry, 6th edition
Published by Elsevier Saunders in 2008
7 pages / 1 lb
Meets the Florida 1-hour requirement in cytogenetics.

1 contact hour: $17
Order code: 1CYTOGENETICS08
Quiz-only packet: $13 (includes shipping/handling)
Code: 1CYTOGENETICS08 quiz-only
Course may be completed online.

Molecular Pathology

Subjects covered in this course include: a discussion of codons; mutations that cause disease; aminoacyl-tRNA synthetase; how protein translation is terminated; a comparison of protein synthesis in prokaryotes vs eukaryotes; posttranslational modifications and their metabolic effects; how protein is synthesized in the rough endoplasmic reticulum; the effects of antibiotics on target bacteria and on the patient.

This course consists of 12 pages from the text Basic Medical Biochemistry (see front cover of this catalog) / Published by Lippincott Williams & Wilkins in 2009 / 1 lb
Meets the Florida 1-hour requirement in molecular pathology.1 contact hour: $17
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