

Laboratory Subscription Titles

WELCOME | our courses are accepted by all states and lab certification agencies



IMPORTANT: This course list is currently being updated. Please look for the revised list by 4/15/23.

NOTE | Subscriptions do not include Combos, Packages, or Textbooks

Last Revision: November 21, 2019

ABOUT US

Serving the Lab Community Since 1997

Our History

Established and operated by Laboratory Professionals, Continuing Education Unlimited, Inc, our parent company, was established in 1997 to provide continuing education for Medical Laboratory professionals.

Our Brands

We have several brands under our corporate name, including:

- 4CEUINC.com
- FloridaMandatory.com (Future Site)
- Jobs4Lab.com
- Jobs4Nursing.com

Our Course Offerings

Although most of our courses are online, we do offer a mix of flexible solutions that allow our customers to choose the format that best serves their needs, including: Textbooks, Online Courses, and Printed Combo Courses. These options come with a variety of ordering choices to accommodate both your personal budget and your professional requirements.

To present a variety of topics, learning levels, and subject matter to the learner, we offer a mix of both custom written courses and scientific articles. All courses are written and reviewed by medical professionals and each course is rereviewed every two years and updated as needed.

A large number of new titles is added every two years in the Spring of odd numbered years.

Who We Serve

4CEUINC.com serves a wide range of Laboratory Professionals at all levels of their career from students to Laboratory Directors.

We serve both individual customers and laboratory groups, which range in size from small 5 person groups to large laboratory networks and their subsidiaries. [How can we serve you or your lab?](#)

[At A Glance]

• • •

Provider Numbers

Florida CE Broker #	20-2256
California AA#	0001
ASCLS P.A.C.E.	511

CE Broker



We report to CE Broker immediately, provided that your license # is in your profile at the time of course completion.

Contact Us

Continuing Education Unlimited
6231 PGA Blvd, Ste 104 #306
Palm Beach Gardens, FL
33418

Toll Free: 888-423-8462

Phone: 561-775-4944

Fax: 561-775-4933

Website: www.4CEUINC.com

Our Customers

- ✓ Individual Purchasers
- ✓ Group Purchasers

Groups consist of 5 or more people and receive discounted pricing. *See Group Section for more detail.

Frequently Asked Questions

Most Commonly Asked FAQs

[Visit Us]

• • •

General

Q. Who accepts your CE courses?

A. Our courses are accepted by **ALL** certification agencies and state licensures.

Q. What is considered a passing score?

A. A passing score is 70% and above.

Q. What are your most popular courses?

A. Our Laboratory Subscription and our Combo Courses are our most popular.

Q. Can a course be shared with multiple users?

A. Only our Combo Courses, Supervisor Upgrades, and Textbooks have share options. Lab Subscriptions and Individual Courses do not.

Q. When will my courses be available after purchase?

A. Subscriptions, Online Combos, Individual Courses, and Answer Sheet formats are available immediately after purchase, while Printed Books and Textbooks must be mailed.

Online Courses

Q. What credit cards do you accept?

A. We accept Visa, Mastercard, American Express, and Discover.

Q. Can I print out or save my online course material?

A. **YES**, you're entitled to print out 1 copy of the reading material.

Q. Can I print out a copy of the quiz questions to work offline?

A. **YES**, we encourage you to print out a copy of the quiz to work offline at your leisure, then return to the live quiz to enter your answers when you're ready.

Florida Licensees

Q. Do you report to CE Broker?

A. **YES**. We report completed courses to CE Broker **immediately**, provided that your license # is in your profile at the time of course completion.

Group Ordering

Q. Do you offer Group Discounts?

A. **YES**. We require at least 5 participants and a person to act as the Coordinator.

Q. Is 4CEUINC willing to price match online continuing education?

A. **Absolutely**. With the exception of free, we can meet or beat your current price.

Q. Who pays for discounted continuing education – employees or the facility?

A. You choose who pays. Cost varies by which payment option you choose & the number of participants. [Inquire about our Group Discounts for more details.](#)

www.4CEUINC.com



Lab CEU Subscription

Lab CEU Subscriptions allow you to pick the titles and categories that you're interested in.

Individual Users: 12 months of access

Group Users: 24 months of access



PRICING: Individual Purchasers = 12 months of access for \$85.
Group Purchasers = 24 months of access. Pricing depends on the number of users and how payment is made (IE: 1 payment from the facility OR each group user pays individually). **We can price match.**

Formats Available:

*** Group purchasers get 24 months of access in their Subscription.**



- Select the titles and categories that you're interested in.
- Contains all individual course titles.
- ***Packages, Combos, and Textbooks are not included.***
- Courses must be completed within your subscription period.

Our Course categories are listed in alphabetical order. This list shows titles actively available, as well as, courses that are in the final stages of Review, and those Pending will be available within 6 months.

Subscription Course List: **Detailed List of Titles Included in the Subscription.** (Last Rev 9/21)

BLOOD BANKING

- - The Blood Banking category contains courses that focus on blood donors, blood donation, and donor processing. **Also see the Immunohematology category for general Immunochem. topics.**

Blood Component Processing, Storage, Special Prep, and Labelling

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: BB002
CONTENT PAGES: 17
QUIZ QUESTIONS: 17

SUMMARY:

- Benefits of component therapy vs administration of whole blood
- List the various anticoagulant / preservatives in use today
- Describe the features of the standard collection bag configuration
- Describe component characteristics: shelf life, chemical changes, etc
- Describe AABB requirements: QC regs, temperature, equipment, etc
- And more...Labelling, irradiation, special proc., plasma derivatives, etc.



Blood Banking

Subscription Course Titles

CHEMISTRY CATEGORY

CASE REPORT: Postpartum Acute Fatty Liver of Pregnancy

NEW

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: C032
CONTENT PAGES: 11
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls the brief background of AFLP.
- Recalls the patient's status at the birth.
- Lists the treatments that the patient received.
- Reviews the Symptom and Lab Results for the patient



Histopathology of Wilson Disease

IN PROGRESS



BASIC INFO:

CONTACT HOURS: TBD
COURSE LEVEL: Intermediate
COURSE CODE: C033
CONTENT PAGES: TBD
QUIZ QUESTIONS: TBD

SUMMARY:

- Recall the background of Wilson Disease (WD).
- Recall the cause and clinical manifestations of WD.
- Discuss the laboratory values seen in WD.

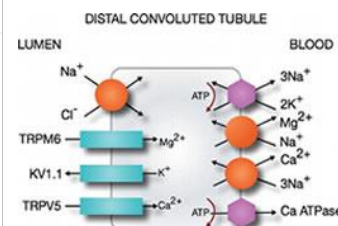
Calcium, Phosphorus, and Magnesium Disorders

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Advanced
COURSE CODE: C030
CONTENT PAGES: 18
QUIZ QUESTIONS: 20

SUMMARY:

- List disorders that can cause hyperkalemia
- List various agents that can cause hyperkalemia
- How to make the diagnosis of hyperkalemia
- Medications used to treat hyperkalemia



Classification and Diagnosis of Diabetes

Blood Test Levels for Diagnosis of Diabetes and Prediabetes

	A1C (percent)	Fasting Plasma Glucose (mg/dL)	Oral Glucose Tolerance Test (mg/dL)
Diabetes	6.5 or above	126 or above	200 or above
Prediabetes	5.7 to 6.4	100 to 125	140 to 199
Normal	About 5	99 or below	139 or below

Definitions: mg = milligram, dL = deciliter
 For all three tests, within the prediabetes range, the higher the test result, the greater the risk of diabetes.

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: C024
CONTENT PAGES: 18
QUIZ QUESTIONS: 16

SUMMARY:

- Explain what diabetes is.
- List the different classifications of diabetes.
- Discuss the genetics involved in diabetes.
- Identify who should be tested for diabetes.
- List the tests used to diagnose diabetes
- Recall the expected results for testing

Subscription Course Titles

Hyperkalemia

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: C027
CONTENT PAGES: 15
QUIZ QUESTIONS: 10

SUMMARY:

- List disorders that can cause hyperkalemia
- List various agents that can cause hyperkalemia
- How to make the diagnosis of hyperkalemia
- Medications used to treat hyperkalemia

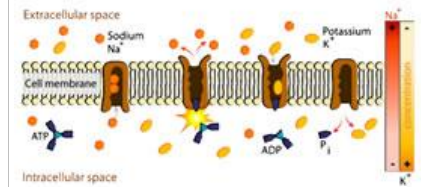
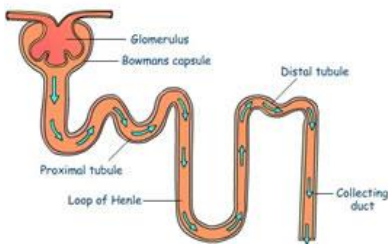


Figure 1: Sodium Potassium ATPase Pump

Hyponatremia



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: C026
CONTENT PAGES: 15
QUIZ QUESTIONS: 9

SUMMARY:

- Recall the pathophysiology of hyponatremia.
- List the main hyponatremic disorders.
- Treatment options for hyponatremia and their outcomes.

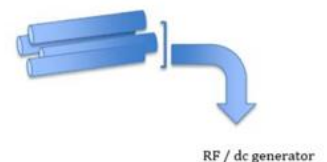
Mass Spectrometry and its Role in Clinical Diagnostics

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: C023
CONTENT PAGES: 13 (many pics)
QUIZ QUESTIONS: 6

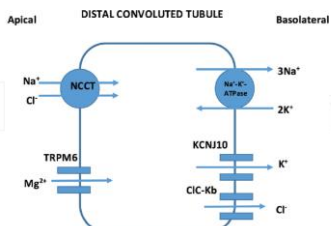
SUMMARY:

- Explain the principle of Mass Spectrometry
- Identify common ionization methods & Mass analyzers
- Explain how Quadrupole works
- Identify common analytes that use Mass Spectrometry



Metabolic Alkalosis

IN
PROGRESS



BASIC INFO:

CONTACT HOURS: TBD
COURSE LEVEL: TBD
COURSE CODE: C029
CONTENT PAGES: 13
QUIZ QUESTIONS: TBD

SUMMARY:

- Details To Follow.....

■ Subscription Course Titles

The Steroid Hormone Cascade

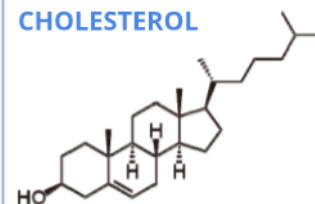
BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: C018
CONTENT PAGES: 21
QUIZ QUESTIONS: 12

SUMMARY:

- Summarize how hormones work: synthesis, effects, etc.
- Describe the role Cholesterol plays in the Hormone Pathway
- List the 5 major steroid hormone groups & ID the associated hormones.
- Explain the role each hormone plays in the body.
- Identify the enzymes that act on each hormone to convert it.
- Correlate a patient's lab results to hormonal disease states

CHOLESTEROL



Thyroid Hormone Excess



BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: C021
CONTENT PAGES: 25
QUIZ QUESTIONS: 15

SUMMARY:

- Recall clinical features of Graves' disease.
- Discuss pathogenesis of Graves' disease.
- List the clinical features of Graves' disease.
- Identify tests available to diagnose Graves' disease.
- List the treatment options available for Graves' disease.

Urine Collection Methods: A Basic Review

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: C028
CONTENT PAGES: 14
QUIZ QUESTIONS: 10

SUMMARY:

- Review the urinary tract and its major components.
- Review what can be determined by testing urine.
- List the different types of urine collection methods.
- Briefly review specimen labelling and specimen rejection.



Urine Collection

- - - END CATEGORY - - -

Subscription Course Titles

CYTOGENETICS CATEGORY

CASE REPORT: Cytogenetic & Genomic Analysis of a Turner Syndrome Patient

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: CYG010
CONTENT PAGES: 13
QUIZ QUESTIONS: 10

SUMMARY:

Turner syndrome is a genetic disorder that affects women. It is caused by an absent or incomplete X chromosome. This course reviews the findings in a patient diagnosed with Turner Syndrome.

Case Studies in Cytogenetics-21

NEW

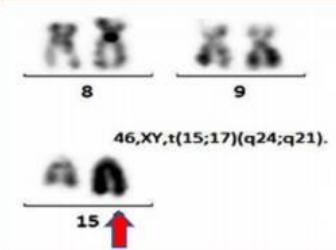
BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Intermediate
COURSE CODE: CYG011
CONTENT PAGES: 18
QUIZ QUESTIONS: 16

SUMMARY:

- Consists of 3 articles:

1. Mixed Phenotype Acute Leukemia With PML-RAR α Positive
2. Philadelphia Chromosome Positive Chronic Myeloid Leukemia With 5Q Deletion At Diagnosis
3. Chromosome Y As A Marker For Sex Discrepancies In Patients With Organ Transplants



6 Hour Cytogenetics Package-19

* PACKAGE *



PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION

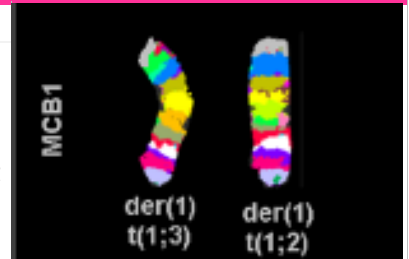
CASE STUDY: A New AML with Complex Karyotype

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Advanced
COURSE CODE: CYG006
CONTENT PAGES: 10
QUIZ QUESTIONS: 10

SUMMARY:

- Recalls observable chromosome abnormalities in AML.
- Analyze the Case Study's laboratory results.
- Evaluates the entire course of the patient's treatment.
- Examine the conclusions made regarding this case report and associated findings.



Subscription Course Titles

BRCA Mutations



BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Intermediate
COURSE CODE: CYG003
CONTENT PAGES: 35
QUIZ QUESTIONS: 25

SUMMARY:

- Describe the function of the BRCA gene.
- Recall who's at risk for carrying the BRCA genes.
- Evaluate the statistical probability of being a carrier.
- List the information assessed in the Gail Model.
- List the specimen types acceptable.
- Review the 6 possible results.

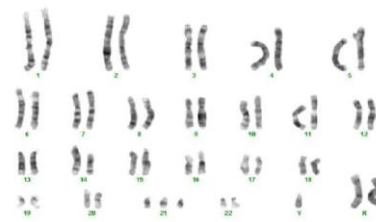
Double Aneuploidy in Down Syndrome

BASIC INFO:

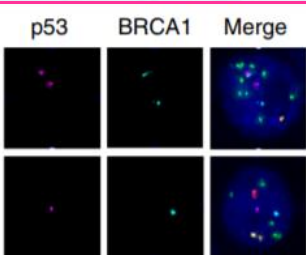
CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: CYG007
CONTENT PAGES: 18
QUIZ QUESTIONS: 20

SUMMARY:

- Recalls the discovery of chromosomes & some of their major syndromes and clinical features.
- Reviews common double aneuploidies involving Chromosome 21 and autosomal chromosomes.
- Discusses double aneuploidies involving Chromosome 21 and sex chromosomes.
- Discusses specific chromosome abnormalities and conditions.



FISH: An Increasingly Demanded Tool



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: CYG
CONTENT PAGES: 18
QUIZ QUESTIONS: 15

SUMMARY:

- Recalls a brief background of FISH.
- Discusses FISH's role in diagnosing hematological malignancies.
- Discusses FISH's role in diagnosing non-hematological malignancies in solid tumors.
- Briefly discusses the progress in FISH methodology.

Morphological Markers of Chromosome Instability

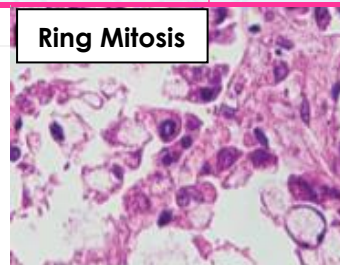
BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: CYG008
CONTENT PAGES: 5
QUIZ QUESTIONS: 10

SUMMARY:

- Defines chromosomal stability.
- Discusses mitotic figures & how they correlate with malignancy.
- Defines atypical mitosis.
- Discusses telomere dysfunction & its relation to carcinogenesis.
- Recalls the use of morphological markers in chromosome instability.

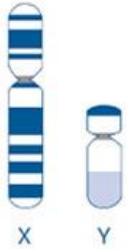
Ring Mitosis



■ Subscription Course Titles

X and Y Chromosome

X and Y
Chromosomes



A Basic Review

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: CYG005
CONTENT PAGES: 10
QUIZ QUESTIONS: 7

SUMMARY:

- Learn the background of the X Chromosome.
- Learn the health conditions related to X Chromosome changes.
- Learn the background of the Y Chromosome.
- Learn the health conditions related to Y Chromosome changes.

- - - END CATEGORY - - -

Subscription Course Titles

CYTOLOGY CATEGORY

Comparison Between Two Liquid-Based Brush Biopsy Collection Methods

IN
REVIEW

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: CY018
CONTENT PAGES: 14
QUIZ QUESTIONS: 9

SUMMARY:

This course takes a look at two cytology collection methods for Liquid-Based Brush Biopsies, discussing the results of both.



Cytological Diagnosis of Bacterial Infections

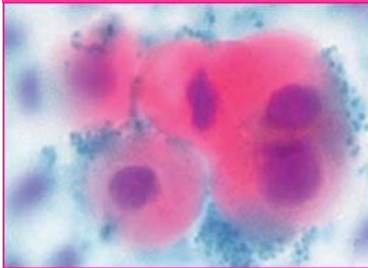
IN
PROGRESS

BASIC INFO:

CONTACT HOURS: TBD
COURSE LEVEL: Intermediate
COURSE CODE: CY019
CONTENT PAGES: TBD
QUIZ QUESTIONS: TBD

SUMMARY:

- Details To Follow.....



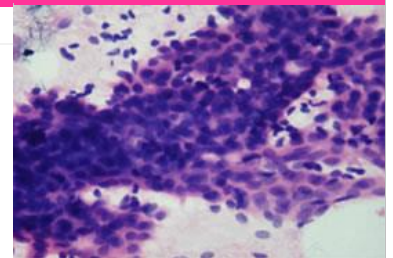
Basics of Breast Cytology

BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Intermediate
COURSE CODE: CY015
CONTENT PAGES: 19
QUIZ QUESTIONS: 14

SUMMARY:

- Recalls the statistics of breast cancer.
- Describes Fine Needle Aspiration Cytology.
- Discusses core biopsy, its limitations, advantages, & techniques.
- Discusses the Prognostic Panel for Breast Tissue and how cytology can identify various disease states.



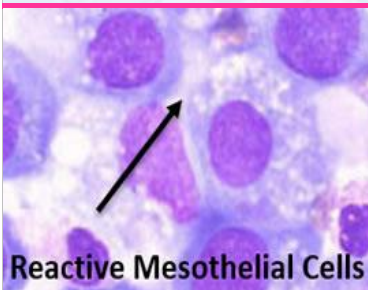
Body Fluid Effusions: Identifying Benign vs. Malignant Cells | Order from Cytology Category

BASIC INFO:

CONTACT HOURS: 3 *
COURSE LEVEL: Intermediate
COURSE CODE: CY014
CONTENT PAGES: 90 slides
QUIZ QUESTIONS: 17

SUMMARY:

- * Provides 2 hours in Cytology and 1 hour in Hematology
- Describes 3 types of effusions.
- Identifies the significance of WBCs in effusions.
- Discusses the gross appearance of serous fluids.
- Lists the differences of benign vs. malignant cellular features.
- Learn to identify benign vs. malignant cells in effusions.



Subscription Course Titles

Case Studies in Cytology-19

BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

COURSE CODE: CY017

CONTENT PAGES: 6

QUIZ QUESTIONS: 9

SUMMARY:

- This Package is made up of three short Case Studies:

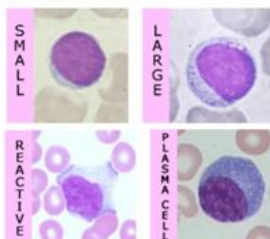
- ✓ Disseminated Histoplasmosis & the Utility of Skin Scrapings
- ✓ Scar Site Metastasis of Renal Cell Carcinoma
- ✓ Neuroendocrine CA of the Colon Presenting as Acute Meningitis

* Course articles are not available individually.



Review of Normal WBCs

Lymphocytes



BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

COURSE CODE: CY013

CONTENT PAGES: 14

QUIZ QUESTIONS: 11

SUMMARY:

- Lists the 5 types of WBCs.
- Reviews a brief background on each WBC type.
- Discusses the causes of increased & decreased WBC values.
- Identifies what cell line each of the 5 WBCs come from.

Nasal Cytology in Children

BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

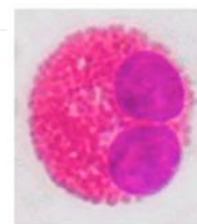
COURSE CODE: CYG012

CONTENT PAGES: 6

QUIZ QUESTIONS: 9

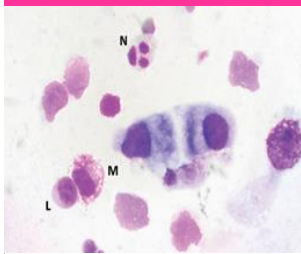
SUMMARY:

- Recalls the background of nasal cytology & what it can diagnose.
- Lists the steps for collection, staining, & review.
- Describes cytology seen in allergic & non-allergic rhinitis.
- Discusses the term "overlapped" rhinitis & possible treatments.
- Discusses why it's desirable to perform nasal cytology in children



Eosinophil

Use of Nasal Cytology in Diagnosing Sinonasal Disorders



BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

COURSE CODE: CY016

CONTENT PAGES: 15

QUIZ QUESTIONS: 18

SUMMARY:

- Discusses the structures and epithelia of the nasal and sinus cavities.
- Recalls the cytological examination methods used for the case studies reviewed in this course.
- Briefly analyzes the patient results from this review.
- Recalls the most common inflammatory cytotypes observed in sinonasal disorders.
- Recalls the details of each type of inflammatory disorder, including Neutrophilic, Eosinophilic, Mast Cell, and Mixed Cell rhinosinusitis.

- - - END CATEGORY - - -

Subscription Course Titles

FLORIDA MANDATORY CATEGORY

Florida – First Renewal Package

1 hr

PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION



- Medical Errors
- HIV Update

*** First Renewal Only**

Florida – Initial Licensure Package

3 hrs



- 1 Hour /AIDS Update

*** Initial Licensure ***

PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION

Florida – Mandatory Renewal Package

4 hrs

PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION

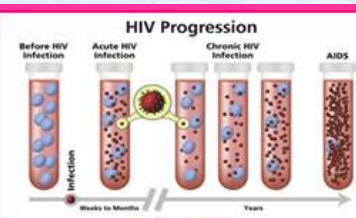


- Medical Errors
- HIV Update
- FL Laws & Rules

*** License Renewal ***

1 Hour HIV-AIDS Review

*** Also available as a 3 hour HIV/ AIDS course.**



1 Hr. HIV/AIDS

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: FM-1HIV019
CONTENT PAGES: 38
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls a brief background on HIV-AIDS, explains what they are, and how HIV causes AIDS.
- Describes the Biology, structure, & replication cycle of HIV.
- Lists the HIV risk factors & symptoms of HIV-AIDS.
- Briefly discusses test methodologies.
- Lists the classes of drugs available for treatment.
- **The requirement is a minimum of 1 hour HIV-AIDS Review.**

Subscription Course Titles

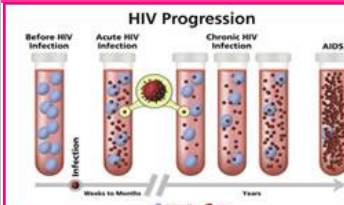
3 Hour HIV-AIDS Review | * Florida BCLP requires a minimum of 1 hour in the HIV/AIDS Category.

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Basic
COURSE CODE: FM-3HIV019
CONTENT PAGES: 3
QUIZ QUESTIONS: 24
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls a brief background on HIV-AIDS, explains what they are, and how HIV causes AIDS.
- Describes the Biology, structure, & replication cycle of HIV.
- Lists the HIV risk factors & symptoms of HIV-AIDS.
- Briefly discusses test methodologies.
- Lists the classes of drugs available for treatment.



3 Hr. HIV/AIDS

Florida Laws & Rules of the Board

UPDATED

FL Laws & Rules



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: LR021
CONTENT PAGES: 18
QUIZ QUESTIONS: 6
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Briefly discusses Florida Law.
- Lists the general makeup of the Board of Clinical Lab Personnel (BCLP).
- Recalls the Laws that govern FL Clinical Lab.
- Recalls the Rules that govern FL Clinical Lab.

Prevention of Medical Errors in Healthcare

UPDATED

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: ME021
COURSE SECTIONS: 23
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls the role of different government agencies to reduce errors.
- Explains the different types of laboratory errors.
- Recalls The Joint Commission's (TJC) Sentinel Event policies.
- Recalls the process associated with Root Cause Analysis.
- Lists the National Patient Safety Goals.



- - - END CATEGORY - - -

Subscription Course Titles

GENERAL CATEGORY

HUMAN TRAFFICKING

* This course has CE Broker credits, but **NOT** ASCLS PACE credits.

NEW

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: HT020
CONTENT PAGES: 13
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recall what Human Trafficking is, discussing who are the victims are.
- Discuss the scope of Human Trafficking both globally and in the U.S.
- List the types of Human Trafficking.
- List the general and physical signs that indicate human trafficking.
- Discuss how to find the social services available for Human Trafficking.
- Recall how to report suspected Human Trafficking.

-- EXPLOITATION IS INVOLVED --



IMPAIRMENT IN THE WORKPLACE

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: RI020
CONTENT PAGES: 14
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Discuss the basics of Substance Use Disorder (SUD).
- Recall Common Substance Use Terminology.
- Discuss reasons & risk factors for SUD, recalling stages of addiction.
- Recall the signs of workplace impairment.
- Define drug diversion and how to prevent it.
- Discuss proper steps for handling a workplace impairment incident.
- List the most common treatment options and return to work requirements.

- - - END CATEGORY - - -

■ Subscription Course Titles

EMBRYOLOGY

HUMAN BLASTOCYST FORMATION AND DEVELOPMENT

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Advanced
COURSE CODE: RI020
CONTENT PAGES: 17
QUIZ QUESTIONS: 14

SUMMARY:

This course takes a look at preimplantation embryo development, specifically focusing on the blastocyst. It discusses the physiology and morphology of the blastocyst, along with any gene expression that's involved.

- - - END CATEGORY - - -

Subscription Course Titles

HEMATOLOGY CATEGORY

CASE REPORT: Postpartum TTP

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: H032
CONTENT PAGES: 11
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recall the brief background of Thrombotic Thrombocytopenia.
- Recall the patient's medical history before the episode of TTP.
- Discuss the medical presentation of TTP in this case and list the treatments the patient received.
- Review and discuss the patient's lab results during her illness.

A REVIEW OF BENZENE AND THE HEMATOLIGCAL SYSTEM

BASIC INFO:

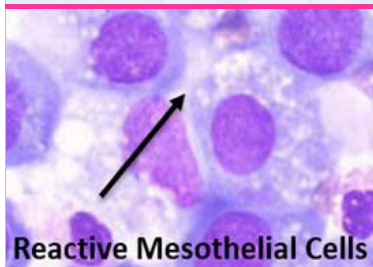
CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: H029
CONTENT PAGES: 4
QUIZ QUESTIONS: 6

SUMMARY:

- Briefly discusses Benzene, including the common routes of exposure.
- Discusses different hematological disease states and how they're affected by Benzene.
- Discusses safety policies, levels of exposure, and risk assessment associated with Benzene exposure.
- Discusses low level exposures to Benzene, recalling genetic and chromosomal change that may occur.



Body Fluid Effusions: Identifying Benign vs. Malignant Cells | [Order from Cytology Category](#)



BASIC INFO:

CONTACT HOURS: 3 *
COURSE LEVEL: Intermediate
COURSE CODE: CY014
CONTENT PAGES: 90 slides
QUIZ QUESTIONS: 17

SUMMARY:

- * Provides 2 hrs. in Cytology and 1 hr. in Hematology
- Describes 3 types of effusions.
- Identifies the significance of WBCs in effusions.
- Discusses the gross appearance of serous fluids.
- Lists the differences of benign vs. malignant cellular features.
- Learn to identify benign vs. malignant cells in effusions.

Case Studies in Hematology

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: H021
COURSE ARTICLES: 4
QUIZ QUESTIONS: 14

SUMMARY:

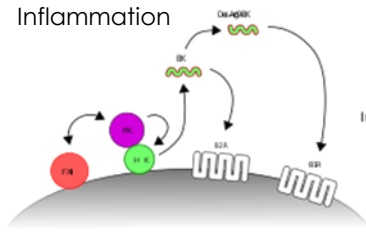
- Includes the following titles:
- Leukemoid Reaction in Patient with Lung Adenocarcinoma.
 - Anemia Secondary to Valproic Acid Therapy.
 - Pancytopenia Associated with Clonazepam.
 - Human Parvovirus B19 Infection in Transplant Patient.



Subscription Course Titles

Contact Pathway of Coagulation and Inflammation

Inflammation



BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Advanced

COURSE CODE: H027

CONTENT PAGES: 8

QUIZ QUESTIONS: 12

SUMMARY:

- Describes what the Contact System is.
- Discusses the Assembly-based activation of the Contact System.
- Discusses how the Contact System is involved in activation of the Intrinsic Pathway.
- Discusses how the Contact System is involved in inflammation and autoimmune disease.

Factor XIII Review

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

COURSE CODE: H023

CONTENT PAGES: 17

QUIZ QUESTIONS: 10

SUMMARY:

- Describes primary & secondary hemostasis.
- Recalls details of the coagulation cascade.
- Lists the coag. factors in the intrinsic, extrinsic & common pathways.
- Recalls the history, structure, epidemiology, etc. of Factor XIII.
- Lists the laboratory tests available for Factor XIII.
- Discusses the Factor XIII case study & associated discussion points



Heparin Induced Thrombocytopenia

HEPARIN



BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

COURSE CODE: H028

CONTENT PAGES: 8

QUIZ QUESTIONS: 14

SUMMARY:

- Names the 2 types of heparin, recalling properties of each.
- Describes the mechanism of action for heparin.
- Discusses clinical assessment of HIT & how/when it occurs.
- Lists the tests used for diagnosis of HIT.
- Lists the alternative treatments for HIT.

Myelodysplastic Syndrome Review

BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

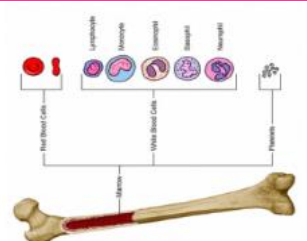
COURSE CODE: H022

CONTENT SLIDES: 10

QUIZ QUESTIONS: 10

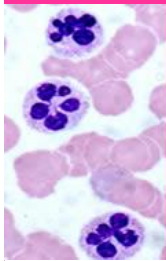
SUMMARY:

- Explain the Epidemiology of Myelodysplastic Syndrome (MDS).
- Recall the signs and symptoms & pathological findings of MDS.
- Discusses the peripheral blood in MDS patients.
- Discusses the bone marrow in MDS patients.
- Lists the treatment options available for MDS patients.
- Recalls the prognosis for patients with MDS.



Subscription Course Titles

Overview of Pediatric Hematology



BASIC INFO:

CONTACT HOURS: 1.5
COURSE LEVEL: Intermediate
COURSE CODE: H028
CONTENT SLIDES: 35
QUIZ QUESTIONS: 10

SUMMARY:

- Recalls the changing sites of hematopoiesis in developing humans and the relevant progenitor cells.
- Recognizes the clinical presentations of select and clinical presentations of select pediatric anemias.

Platelets: A Basic Review

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: H029
CONTENT PAGES: 7
QUIZ QUESTIONS: 8

SUMMARY:

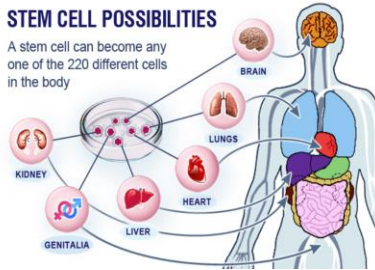
- Briefly discusses how platelets are formed from Megakaryocytes.
- Recalls the functional properties of platelets and the Zones that make up their structure.
- Describes the Alpha Granules, recalling their function.
- Describes the Dense Granules, recalling their function.
- Describes the Lysosomes, recalling their function.
- Briefly discusses Autologous Platelet Rich Plasma.



Stem Cell Basics

STEM CELL POSSIBILITIES

A stem cell can become any one of the 220 different cells in the body



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: H019
CONTENT PAGES: 17 + glossary
QUIZ QUESTIONS: 12

SUMMARY:

- Defines a stem cell.
- Recalls the properties unique to all stem cells.
- Discusses what an Embryonic Stem Cell is and what an Adult Stem Cell, defining features and tests of each.
- Lists similarities between Embryonic and Adult Stem Cells.
- Defines what a Pluripotent Stem Cell is.
- Defines glossary terms associated with stem cells.

Understanding Components of the CBC

BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Intermediate
COURSE CODE: H020
CONTENT PAGES: 57
QUIZ QUESTIONS: 22

SUMMARY:

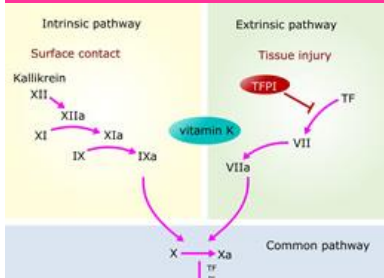
- Recalls the composition of blood
- Lists the normal values for RBC & RBC indices and lists reasons for abnormal values.
- Lists normal values for WBC counts and lists reasons for abnormal values.
- Lists normal values for Platelets and causes for abnormal values

RED BLOOD CELLS



Subscription Course Titles

Understanding Hemostasis and Basic Coagulation Testing



BASIC INFO:

CONTACT HOURS: 1.5

COURSE LEVEL: Basic

COURSE CODE: H025

CONTENT SLIDES: 34

QUIZ QUESTIONS: 10

SUMMARY:

- Summarizes the process of coagulation.
- Reviews hemostasis physiology to understand the coagulation assays.
- Distinguishes between lab coagulation assays.
- Discusses the major natural inhibitor pathways of coagulation initiation.
- Diagnoses basic disorders of hemostasis given commonly used laboratory assay values.

- - - END CATEGORY - - -

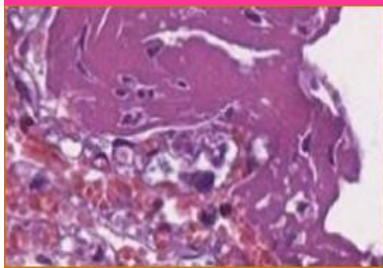
Subscription Course Titles

HISTOLOGY CATEGORY

- - Also see the Immunohistochemistry category for IHC and Advanced Histology topics.

Gross & Histopathology of COVID-19 Autopsy Specimens

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: H045
CONTENT PAGES: 12
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Discuss the brief background of the COVID patients in this case report.
- Recall the pulmonary histopathology of the COVID + specimens.
- Recall the olfactory bulb histopathology of the COVID positive specimens.
- Recall the renal histopathology of the COVID positive specimens.

Histology of the Human Placenta

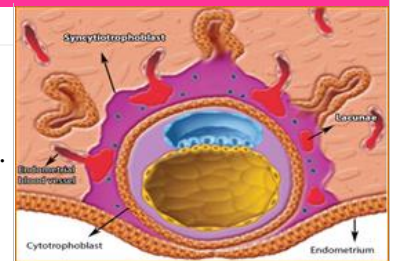
NEW

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: H047
CONTENT PAGES: 18
QUIZ QUESTIONS: 12
TABLE OF CONTENTS: [View](#)

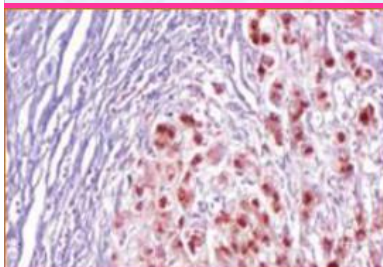
SUMMARY:

- Describe placental development.
- Recall the details of the placental villous tree.
- Recall the role of placental histology in clinical practice.



Histopathology of Wilsons Disease

NEW



BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: H046
CONTENT PAGES: 18
QUIZ QUESTIONS: 15
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recall the background of Wilson Disease (WD).
- Recall the cause and clinical manifestations of WD.
- Discuss the laboratory values seen in WD.
- Recall the histopathology and histochemistry of WD.

Artifacts in Histopathology: A Potential Cause of Misinterpretation

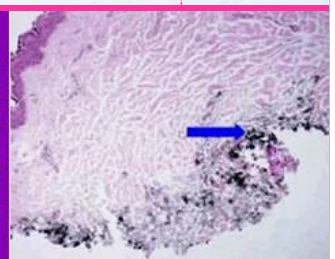
BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: H035
CONTENT PAGES: 14
QUIZ QUESTIONS: 15

SUMMARY:

- Identify the different types of artifacts encountered in Histology specimens.
- Discusses pre-fixation artifacts, from tattoo pigment, surgery, and contamination.
- Discusses artifacts encountered in specimen processing, fixation, cutting, staining, mounting, and microscopy.

Artifacts



Subscription Course Titles

Estrogen and Cancer: Understanding Estrogen Receptors



BASIC INFO:

CONTACT HOURS: 1.5

COURSE LEVEL: Basic

COURSE CODE: H033

CONTENT PAGES: 25

QUIZ QUESTIONS: 10

SUMMARY:

- Defines what estrogens are and what tissues they target.
- Explains estrogen receptors & how they trigger gene activation.
- Recalls estrogen's effects on cell changes & cell proliferation.
- Discusses how estrogen can trigger cancer.
- Explains how anti-estrogen and SERMS work.

Histological Changes of the Placenta in Diabetes

BASIC INFO:

CONTACT HOURS: 1.5

COURSE LEVEL: Intermediate

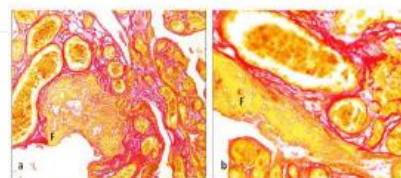
COURSE CODE: H030

CONTENT PAGES: 6

QUIZ QUESTIONS: 10

SUMMARY:

- Describes the placenta recalling its normal pathology.
- Describes the method of placental tissue prep & staining.
- Discusses the differences seen between the diabetic & normal placental tissue.
- Recalls the different staining patterns for each type of stain.
- Recalls the histopathological differences: normal / diabetic.



DIABETIC PLACENTA

Histological Stains: A Literature Review and Case Study

Histo Stains



BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

COURSE CODE: H042

CONTENT PAGES: 7

QUIZ QUESTIONS: 7

SUMMARY:

- Recalls specific aspects of Histopathology, including staining, fixation, gross & micro exams, advanced Histo. techniques, etc.
- Discusses literature review of historical staining techniques and important histological stains – both past & present.
- Reviews two case studies discussing staining methods.

Histology Microtechniques

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

COURSE CODE: H044

CONTENT PAGES: 11

QUIZ QUESTIONS: 15

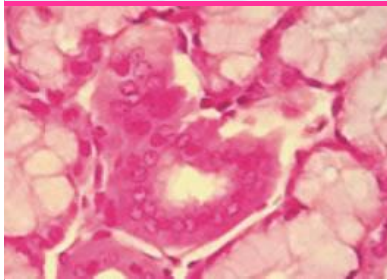
SUMMARY:

- Discusses techniques associated with histology, including: tissue preparation, fixation & their types and classification, microwave irradiation, decalcifying agents, dehydration, clearing and embedding.
- Discusses microtomy, including: the cryostat, microtome knives, section thickness, etc.



Subscription Course Titles

Histology of Normal Tissues



BASIC INFO:

CONTACT HOURS: 3.5

COURSE LEVEL: Basic

COURSE CODE: H041

CONTENT PAGES: 14

QUIZ QUESTIONS: 19

SUMMARY:

- Recalls the background of histology.
- Describes and discusses epithelial tissue.
- Describes and discusses connective tissue.
- Describes and discusses muscle tissue.
- Describes and discusses nervous tissue & the nervous system.

Histology Stains: A Historical Review

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Basic

COURSE CODE: H036

CONTENT PAGES: 14

QUIZ QUESTIONS: 9

SUMMARY:

- Discusses specific aspects of Histopathology: staining fixation, and gross & micro review.
- Lists some advanced histological stains.
- Lists the international regulating bodies for the control & standardization of biological staining methods.
- Recalls the history of staining techniques.
- Lists some of the stains that have been used in both past & present.
- Lists staining procedures developed more recently.



Microwave Assisted Tissue Preparation



BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

COURSE CODE: H038

CONTENT PAGES: 7

QUIZ QUESTIONS: 7

SUMMARY:

- Recalls the background of microwave application in histology.
- Discusses the various applications of microwave use for: tissue fixation, fixation of cultured cells, decalcification, immunohistochemistry, immunofluorescence, antigen retrieval, fatty tissues, cryosectioning, and special staining.

Pathology of Breast Diseases

BASIC INFO:

CONTACT HOURS: 3

COURSE LEVEL: Intermediate

COURSE CODE: H037

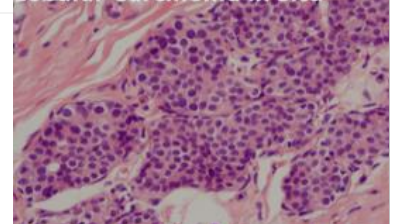
CONTENT PAGES: 28

QUIZ QUESTIONS: 15

SUMMARY:

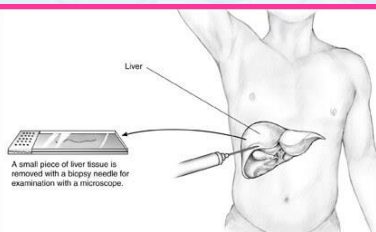
- Discusses the impact that histopathology plays in treatment.
- Compares the different types of tissue collection methods.
- Explains the different chemical testing that can be done on breast biopsies, such as, estrogen, progesterone, and HER2 status.
- Compares 9 benign breast lesions listed in the article.
- Discusses breast neoplasms.
- Recalls the basics of breast cancer & compares 20 types in article.

Lobular Carcinoma in Situ



Subscription Course Titles

Principles of the Liver Biopsy Procedure



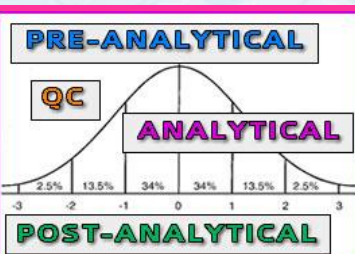
BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: H027
CONTENT PAGES: 7
QUIZ QUESTIONS: 9

SUMMARY:

- Compares the different types of liver biopsy.
- Lists the testing & other factors considered before biopsy.
- Describes and discusses connective tissue. Lists disease states where biopsy may be performed.
- Recalls blood testing that's performed within 24 hrs. of biopsy.
- Explains how the patient is prepped for biopsy.

The Role of Technical QC in Histology Laboratories



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: H043
CONTENT PAGES: 4
QUIZ QUESTIONS: 8

SUMMARY:

- Defines Quality Management.
- Discusses Risk Analysis and Evaluation.
- Discusses the role of Technical Quality Control and its role in Histology Laboratories.
- Discusses Quality Assurance and the three phases.

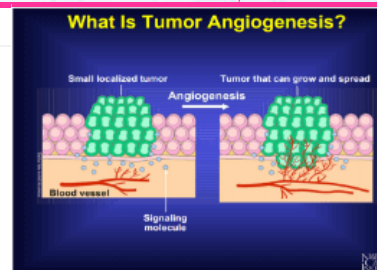
Understanding Angiogenesis

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: H032
CONTENT "SLIDES": 28
QUIZ QUESTIONS: 10

SUMMARY:

- Defines metastasis, angiogenesis, and tumor angiogenesis, describing how they occur in relation to cancer.
- Recalls where angiogenesis occurs normally in the body.
- Describes how angiogenesis is regulated and how it affects tumor growth.
- Lists the molecules and proteins that can activate angiogenesis.
- Lists the proteins that inhibit angiogenesis.
- Discusses drugs that block angiogenesis.



Understanding Cancers of Childhood – PART I



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: H022
CONTENT PAGES: 14
QUIZ QUESTIONS: 12

SUMMARY:

- Analyzes basic statistics associated with childhood cancers.
- Lists various types of childhood head and neck cancers.
- Recalls risk factors, histology, etc. for nasopharyngeal cancers.
- Discusses childhood Esthesioneuroblastomas.
- Recalls histology, presentation, evaluation, & treatment for thyroid tumors.
- Discusses salivary gland tumors, laryngeal cancers & more.

■ Subscription Course Titles

Understanding Cancers of Childhood – PART II

BASIC INFO:

CONTACT HOURS: 4

COURSE LEVEL: Basic

COURSE CODE: H024

CONTENT PAGES: 33

QUIZ QUESTIONS: 24

SUMMARY:

- Lists various types of thoracic cancers.
- Discusses details, statistics of breast, lung, bronchial, mesothelioma, etc.
- Lists various types of abdominal tumors.
- Incidence, risk factors, etc. of adrenal cortex, colorectal & GIST tumors.
- Lists various genital & urinary tumors and their statistical incidence.
- Lists the various other types of rare cancers seen in childhood, including MEN, pheochromocytoma, and melanoma.



- - - END CATEGORY - - -

■ Subscription Course Titles

IMMUNOHEMATOLOGY CATEGORY

- - Also see the Blood Banking category for additional topics.

Umbilical Cord Blood Collection & Banking

NEW

BASIC INFO:

CONTACT HOURS: 2 *
COURSE LEVEL: Intermediate
COURSE CODE: IH018
CONTENT PAGES: 13
QUIZ QUESTIONS: 5
TABLE OF CONTENTS: [View](#)

SUMMARY:

- * Provides 1 hr Immunohematology & 1 hr Blood Banking
- Briefly define umbilical cord blood.
- Briefly recall the uses, statistics, and regulation of umbilical cord blood.
- Recall the pre-birth collection decisions for the parents.



Blood Safety



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: IH015
CONTENT PAGES: 19
QUIZ QUESTIONS: 12

SUMMARY:

- Identifies the role each public agency plays in blood safety.
- Lists documents used to screen blood donors.
- Lists adverse reactions that can happen from transfusion.
- Lists infectious organisms that can affect the blood supply.
- Lists tests that the FDA states are mandatory for screening.
- This course overlaps with Transfusion Transmitted Infections

Case Study: Alloantibody Causing Blood Type Conflict in Pregnant Female

BASIC INFO:

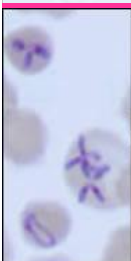
CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: IH018
CONTENT PAGES: 8
QUIZ QUESTIONS: 5

SUMMARY:

- Discusses the process of determining ABO/Rh of the patient in this case study.
- Recalls the process of performing antibody detection on the patient in this case study.
- Interprets the results for the patient in this case study.



Mini Reviews in Immunohematology-19



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: IH020
CONTENT PAGES: 5
QUIZ QUESTIONS: 10

SUMMARY:

- This Package is made up of three short articles:
 - ✓ Implications of HLA in TRALI and Platelet Refractoriness
 - ✓ Early vs. Delayed Transfusion in Cirrhotic Patients
 - ✓ Zoonotic Babesiosis – A Growing Concern in Transfusion
- * Course articles are not available individually.

Subscription Course Titles

Risks, Complications, and Reactions Associated with Transfusions

BASIC INFO:

CONTACT HOURS: 2 *

COURSE LEVEL: Intermediate

COURSE CODE: H016

CONTENT PAGES: 24

QUIZ QUESTIONS: 13

SUMMARY:

- Discusses the current trends in blood safety.
- Describes causes & presentation of allergic reactions.
- Identifies cause of hypotensive transfusion reaction.
- Lists various complications from massive transfusion.
- Describes causes & presentation of post transfusion purpura.
- Describes the causes of TACO, TAD, TAGvHD, TRALI, and TRIM.
- Identifies causes of transfusion transmitted infections (TTI)
- Provides 1 hour in Immunohematology & 1 hour in Blood Banking

POST-TRANSFUSION
TRALI



Transfusion Transmitted Infections

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

COURSE CODE: H019

CONTENT PAGES: 15

QUIZ QUESTIONS: 12

SUMMARY:

- Lists the bacterial organisms associated with TTIs.
- Lists the parasitic diseases associated with TTIs and testing methods.
- Lists the spirochetes associated with TTIs and testing methods.
- Lists the viral diseases associated with TTIs and testing methods.
- Provides 1 hour in Immunohematology & 1 hour in Blood Banking



- - - END CATEGORY - - -

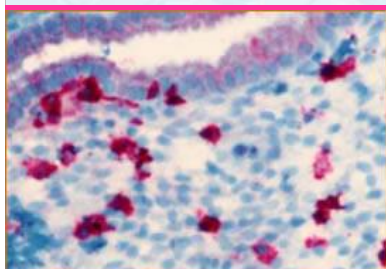
Subscription Course Titles

IMMUNOHISTOCHEMISTRY CATEGORY

- - Also see the Histology category for additional topics.

A Short Review of Immunohistochemistry

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: IHC008
CONTENT PAGES: 25
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Defines what estrogens are and what tissues they target.
- Explains estrogen receptors & how they trigger gene activation.
- Recalls estrogen's effects on cell changes & cell proliferation.
- Discusses how estrogen can trigger cancer.
- Explains how anti-estrogen and SERMS work.

CASE REPORT: 3rd Trimester Placental Pathology in COVID Positive Women

NEW

BASIC INFO:

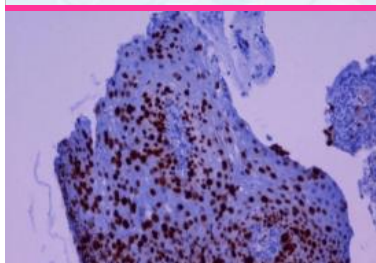
CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: IHC009
CONTENT PAGES: 6
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Describes the placenta recalling its normal pathology.
- Describes the method of placental tissue prep & staining.
- Discusses the differences seen between the diabetic & normal placental tissue.
- Recalls the different staining patterns for each type of stain.
- Recalls the histopathological differences: normal / diabetic.



Ancillary Techniques in Histopathologic Diagnosis of Cervical SIL & GIL



BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: HI034
CONTENT PAGES: 21
QUIZ QUESTIONS: 20

SUMMARY:

- Discusses HPV induced cervical cancer.
- Discusses precursor lesions of cervical carcinoma.
- Discusses role HPV plays in carcinogenesis and the actions between oncoproteins and their cellular target proteins.
- Lists IHC stains used in the diagnosis of cervical lesions.
- Discusses detection of HPV through in Situ Hybridization

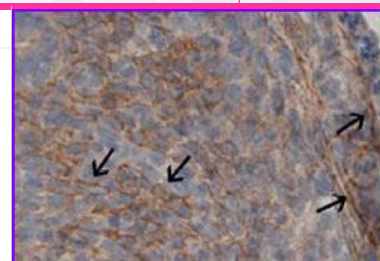
Antigen Retrieval for Light & Electron Microscopy

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Advanced
COURSE CODE: IHC006
CONTENT PAGES: 19
QUIZ QUESTIONS: 12

SUMMARY:

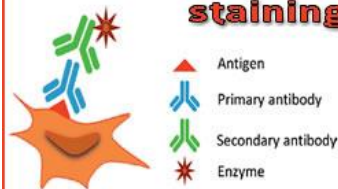
- Briefly discusses antigen-antibody reactions.
- Discusses the different mechanisms of chemical fixation.
- Recalls the mechanisms of Heat Induced Antigen Retrieval.
- Discusses HIAR as it applies to immunoelectron microscopy.
- Describes the effects of diluents on antibodies in IHC.



Subscription Course Titles

Detection Systems in Immunohistochemistry

Indirect Immuno-staining



BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: IHC007
CONTENT PAGES: 15
QUIZ QUESTIONS: 15

SUMMARY:

- Describes Direct Detection Methods, recalling when they're used.
- Describes Indirect Methods, recalling when they're typically used.
- Discusses the Bridge Methods in IHC.
- Discusses the Biotin-Avidin/Streptavidin-Based Methods, listing the types.
- Discusses Polymer-Based Methods in IHC.
- Discusses Tyramide-Based Signal Amplification Methods in IHC.
- Discusses Rolling Circle Amplification Methods in IHC.

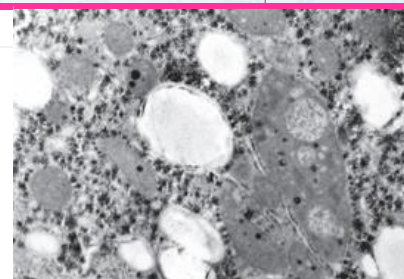
Electron Microscopy of Liver Biopsies

BASIC INFO:

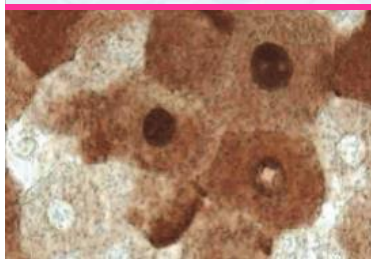
CONTACT HOURS: 4
COURSE LEVEL: Intermediate
COURSE CODE: HI029
CONTENT PAGES: 24
QUIZ QUESTIONS: 20

SUMMARY:

- Discusses general features of the liver biopsy.
- Describes organelle pathology.
- Lists inborn lysosomal and metabolic diseases.
- Discusses infections and infestations.
- Lists different drugs and their hepatotoxicity.



Immunohistochemistry for Chronic Hepatitis Diagnosis



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: HI031
CONTENT PAGES: 13
QUIZ QUESTIONS: 10

SUMMARY:

- Discusses Hepatitis B virus (HBV) and Hepatitis C virus (HCV).
- Discusses HBV, HCV, Hepatitis Delta antigens.
- Discusses viral hepatitis antigen detection with visual examples.

Immunohistochemistry in Breast Pathology

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Advanced
COURSE CODE: HI040
CONTENT PAGES: 16
QUIZ QUESTIONS: 12

SUMMARY:

- Recalls the background of IHC in breast pathology.
- Recalls the steps involved in IHC of the breast.
- Discusses quality control in IHC.
- Discusses prognostic & predictive roles of ER, PR, & Her-2 neu.
- Recalls the technical aspects in preanalytic, analytic, & postanalytic testing.



■ Subscription Course Titles

Immunohistochemistry in Cervical Cancer

Immunohistochemistry



BASIC INFO:

CONTACT HOURS: 1

COURSE LEVEL: Intermediate

COURSE CODE: HI039

CONTENT PAGES: 6

QUIZ QUESTIONS: 7

SUMMARY:

- Recalls the background of cervical cancer.
- Identifies the precursor lesions of squamous cell carcinoma.
- Discusses how IHC can identify cervical squamous cell carcinoma.
- Identifies the markers linked to tumor metastasis.
- Discusses markers that may predict response to chemotherapy.

- - - END CATEGORY - - -

Subscription Course Titles

MANAGEMENT / SUPERVISION CATEGORY

Understanding HIPAA

NEW



BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Basic
COURSE CODE: SU029
CONTENT SLIDES: 63
QUIZ QUESTIONS: 12
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls what HIPAA is and who must comply.
- Recalls the various rules associated with HIPAA.
- Explains how the Privacy & Security Rules affect PHI.
- List the Physical, Administrative, & Technical Safeguards of HIPAA.
- Recall what happens if a HIPAA Breach occurs & associated fines.
- List the types of breaches that HHS tracks.

Assay Validations: Make Sure You Do It Right the First Time

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: SU023
CONTENT SLIDES: 29
QUIZ QUESTIONS: 9

SUMMARY:

- Lists the necessary steps to validate a new assay.
- Lists considerations when choosing a new clinical assay.
- Defines accuracy vs. precision.
- Reviews correlation.
- Reviews reference range determination.
- Discusses interference studies.
- Discusses special validation considerations



Basic Quality Control Review



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SU019
CONTENT PAGES: 11.5
QUIZ QUESTIONS: 10

SUMMARY:

- Lists the purpose of QA, listing factors that QA monitors.
- Defines Quality Control (QC) and discusses quality control material.
- Lists the CLIA policy requirements for a good QC program.
- Compares and contrasts Random and Systematic errors.
- Defines how mean and standard deviation are used in QC.
- Guides interpretation of QC results using the Westgard Rules.

CLIA: A Brief Overview

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SU025
CONTENT PAGES: 8
QUIZ QUESTIONS: 6

SUMMARY:

- Recalls who CLIA is.
- Discusses the steps for enrolling in a CLIA program.
- Lists the types of CLIA Certificates, explaining each type.
- Briefly discusses when Proficiency Testing must be performed.
- Recalls Test Method Categorization, listing the levels of complexity.



Subscription Course Titles

Employee Files: Don't Get Lost in the Paperwork



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SU022
CONTENT SLIDES: 25
QUIZ QUESTIONS: 5

SUMMARY:

- Identifies the pre- and post-hire education that must be documented on each laboratory employee.
- Describes annual education requirements for laboratory staff.
- Describes competency assessment requirements and their frequency.
- Specifies items that need to be documented for employee disciplinary action.

Prevention of Medical Errors in Healthcare | Florida Licensees see FL Mandatory Category

UPDATED

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: ME021
COURSE SECTIONS: 23
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- **FLORIDA LICENSEES – See the FL Mandatory Category**
- Recalls the role of different government agencies to reduce errors.
- Explains the different types of laboratory errors.
- Recalls The Joint Commission's (TJC) Sentinel Event policies.
- Recalls the process associated with Root Cause Analysis.
- Lists the National Patient Safety Goals.



Proficiency Testing: FAQ Basics



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: SU024
CONTENT SLIDES: 47
QUIZ QUESTIONS: 16

SUMMARY:

- Lists the agencies involved in CLIA and Proficiency Testing (PT).
- Defines what Proficiency Testing is and when it should be performed.
- Lists what you need to know about Proficiency Testing enrollment.
- Discusses the importance of Proficiency Testing & need for result privacy.
- Discusses what happens when your lab receives unsuccessful or failing PT.
- Recalls the list of Non-Waived analytes that require Proficiency Testing.

- - - END CATEGORY - - -

Subscription Course Titles

MEDICAL ETHICS/DIVERSITY CATEGORY

Ethics in Laboratory Medicine

NEW



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: ETH002
CONTENT PAGES: 16
QUIZ QUESTIONS: 10

SUMMARY:

The course discusses the evolution of national and international ethical guidelines; principles of ethics; code of ethics; and how ethical issues affect the laboratory.

- **ASCP Category** = Medical Ethics
 - **CE Broker Categories:** FL = Supervision/Administration |
 LA = CE for Lab Personnel | TN = CE Pertaining to Laboratory

Gender and LGBTQ+ Terminology Review

NEW

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: ETH001
COURSE PAGES: 23
QUIZ QUESTIONS: 10

SUMMARY:

This course reviews common terminology as it relates to the gender spectrum and the LGBTQ+ community. It also reviews some of the more popular flags that represent different sectors of the community.

- **ASCP Category** = Medical Ethics
 - **CE Broker Categories:** FL = General | LA = CE for Lab Personnel |
 TN = CE Pertaining to Laboratory



- - - END CATEGORY - - -

Subscription Course Titles

MICROBIOLOGY CATEGORY

Antibiotic Resistance: Review of Serious Threats

NEW

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: M032
CONTENT PAGES: 24 (many pics)
QUIZ QUESTIONS: 11

SUMMARY:

- List the current serious antibiotic resistant threats.
- Recall important information you need to know about each organism, such as how it's spread, who may be at risk, etc.
- Recall the resistance profile over time for each organism.



Coronavirus Disease: COVID-19

NEW

CORONAVIRUS DISEASE COVID-19

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Basic
COURSE CODE: M030
CONTENT PAGES: 32
QUIZ QUESTIONS: 21
TABLE OF CONTENTS: [View](#)

SUMMARY:

- History, classification, lifecycle, & clinical presentation of coronaviruses
- List the seven human coronaviruses.
- Recall the name evolution of COVID-19 & epidemiology factors.
- Describe the clinical presentation for COVID-19.
- Recall how COVID-19 is diagnosed and treated.
- Recall how the Public Health System manages this virus.

Cytological Diagnosis of Bacterial Infections | Order from Cytology Category

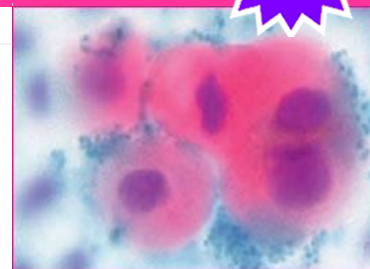
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PROGRESS

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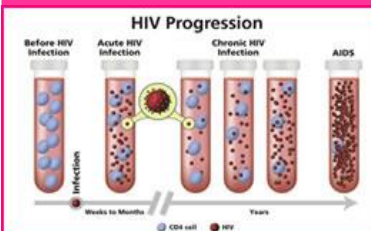
CONTACT HOURS: TBD
COURSE LEVEL: Intermediate
COURSE CODE: TBD
CONTENT PAGES: TBD
QUIZ QUESTIONS: TBD

SUMMARY:

- Details To Follow.....
- This course will have hours split between Microbiology & Cytology



1 Hour HIV-AIDS Review | Florida Licensees see FL Mandatory Category



1 Hr. HIV/AIDS

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: 1HIV019
CONTENT PAGES: 38
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls a brief background on HIV-AIDS, explains what they are, and how HIV causes AIDS.
- Describes the Biology, structure, & replication cycle of HIV.
- Lists the HIV risk factors & symptoms of HIV-AIDS.
- Briefly discusses test methodologies.
- Lists the classes of drugs available for treatment.

Subscription Course Titles

3 Hour HIV-AIDS Review

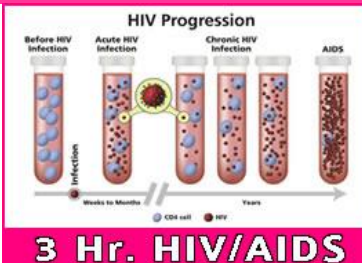
Florida Licensees see FL Mandatory Category

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Basic
COURSE CODE: 3HIV019
CONTENT PAGES: 3
QUIZ QUESTIONS: 24
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls a brief background on HIV-AIDS, explains what they are, and how HIV causes AIDS.
- Describes the Biology, structure, & replication cycle of HIV.
- Lists the HIV risk factors & symptoms of HIV-AIDS.
- Briefly discusses test methodologies.
- Lists the classes of drugs available for treatment.



3 Hr. HIV/AIDS

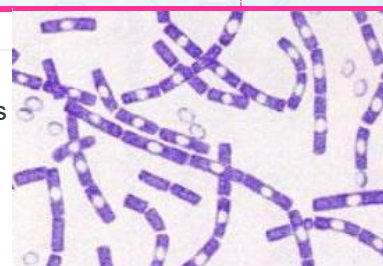
Bioterrorism: A Worldwide Threat

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: M025
CONTENT PAGES: 13
QUIZ QUESTIONS: 12

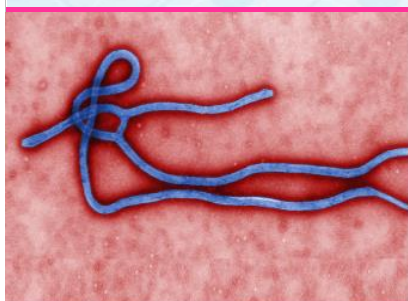
SUMMARY:

- Lists all the biological agents of terrorism.
- Discusses the background of each agent and recalls whether it's been used in a terror attack.
- Lists the chemical agents of terrorism.
- Discusses the chemical agents of terrorism, how they work, and whether they've been used in a terror attack.



Ebola Review for the Laboratory

**BEING
UPDATED**



BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Intermediate
COURSE CODE: SU022
CONTENT PAGES: 25
QUIZ QUESTIONS: 25

SUMMARY:

- Currently being updated. Check back Mid 2023.

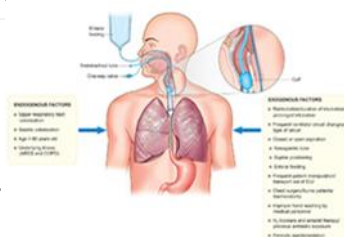
Microbiology of Ventilator Associated Pneumonia

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: M029
COURSE PAGES: 14
QUIZ QUESTIONS: 18

SUMMARY:

- Discusses the background for Ventilator Associated Pneumonia (VAP).
- Lists the risk factors associated with VAP.
- Discusses the most common organisms in VAP.
- Recalls the virulence of the major organisms involved in VAP.
- Recalls the antimicrobial susceptibility of the common organisms.
- Discusses the methods for laboratory diagnosis of VAP.



Subscription Course Titles

Monkeypox: A Detailed Review

NEW

BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Basic
COURSE CODE: M035
CONTENT SLIDES: 55
QUIZ QUESTIONS: 15

SUMMARY:

This course gives a detailed look into the monkeypox virus reviewing the following areas: history, proper terminology, transmission, disease progression, signs & symptoms, testing & diagnosis, treatment, prevention, isolation procedures, and steps for infection control.

Monkeypox



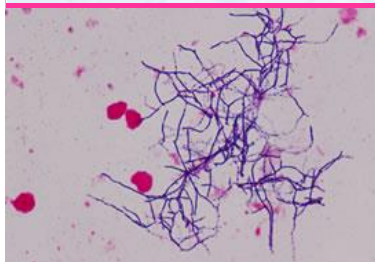
Nocardiosis: Clinical and Pathological Aspects

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: M026
CONTENT PAGES: 13
QUIZ QUESTIONS: 12

SUMMARY:

- Recalls the Taxonomy and Epidemiology of Nocardia.
- Describes the microbiological profile of Nocardia.
- Discusses the clinical features of Nocardia.
- Briefly recalls the clinical features of Nocardia in immunocompromised patients.
- Lists the treatment options available for treating Nocardia.



People, Pets, and Zoonoses | Check Back Mid 2023

BEING
UPDATED

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: M018
CONTENT PAGES: 25
QUIZ QUESTIONS: 12

SUMMARY:

- Identifies the term Zoonose, recalling who's at risk & prevention strategies.
- Lists the zoonotic diseases each type of animal can carry.
- Recalls general information about the most common bacterial, fungal, viral, and parasitic zoonoses, including transmission, symptoms, diagnosis, and treatment strategies.



Sexually Transmitted Diseases

STD

SEXUALLY
TRANSMITTED
DISEASE

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: M019
CONTENT PAGES: 24
QUIZ QUESTIONS: 15

SUMMARY:

- Identifies the infectious agents that cause STDs.
- Lists the organisms capable of causing genital ulcers & warts, urethritis, cervicitis, trichomonas, and vulvovaginal candida, describing the signs & symptoms, diagnosis, and treatment.
- Briefly discusses the causative agents for PID, epididymitis, and proctitis.
- Lists several ways to prevent STDs from occurring.

Subscription Course Titles

Tickborne Illness Package

IN
PROGRESS

PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION

* PACKAGE *



Tickborne Illness: Vector Review

IN
PROGRESS



BASIC INFO:

CONTACT HOURS: TBD
COURSE LEVEL: Basic
COURSE CODE: TBD
CONTENT PAGES: TBD
QUIZ QUESTIONS: TBD

SUMMARY:

- Reviews the vectors associated with tickborne illness.
- Discusses their stages and lifecycle.
- Lists the diseases associated with each type of tick.

Tickborne Illness: Review of Diseases

IN
PROGRESS

BASIC INFO:

CONTACT HOURS: TBD
COURSE LEVEL: Basic
COURSE CODE: TBD
CONTENT PAGES: TBD
QUIZ QUESTIONS: TBD

SUMMARY:

- Reviews Anaplasmosis, Babesiosis, Ehrlichiosis, Lyme Disease, Rocky Mountain Spotted Fever, Tularemia, and other lesser known tickborne diseases.
- Lists the locations found, incubation period, signs & symptoms, general laboratory findings, and treatment for the main tickborne diseases.



Ehrlichiosis

Understanding Sepsis



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: M028
CONTENT SLIDES: 58
QUIZ QUESTIONS: 14

SUMMARY:

- Generally, defines what sepsis is, how it starts, and risk factors.
- Lists the differences between Sepsis-2 and Sepsis-3.
- Recalls common signs and symptoms a patient may experience.
- Lists the lab tests commonly ordered to diagnose sepsis & significance of their values.
- Recalls treatments commonly used for sepsis patients.
- Lists some of the conditions a patient may experience with post sepsis syndrome (PSS).

■ Subscription Course Titles

Zika Virus: Update and Overview

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: M024
CONTENT PAGES: 9
QUIZ QUESTIONS: 12

SUMMARY:

- Describes where Zika virus was first discovered.
- Recognizes species of mosquito that carry Zika in the U.S.
- Elaborates how Zika virus can and cannot be spread.
- Describes the Pathologies cause by Zika in the fetus and newborns.
- Discusses testing for the Zika virus.



- - - END CATEGORY - - -

Subscription Course Titles

MOLECULAR PATHOLOGY CATEGORY

A Basic Guide to Real Time PCR in Microbial Diagnostics

IN
PROGRESS

BASIC INFO:

CONTACT HOURS: TBD

COURSE LEVEL: Intermediate

COURSE CODE: MP015

CONTENT PAGES: TBD

QUIZ QUESTIONS: TBD

SUMMARY:

- Details To Follow.....



COVID-19 Pandemic: From Genetics and Genomics, to Therapy, and Vaccination

IN
PROGRESS

BASIC INFO:

CONTACT HOURS: TBD

COURSE LEVEL: Intermediate

COURSE CODE: MP014

CONTENT PAGES: TBD

QUIZ QUESTIONS: TBD

SUMMARY:

- Details To Follow.....



mRNA in cancer immunotherapy

IN
PROGRESS

BASIC INFO:

CONTACT HOURS: TBD

COURSE LEVEL: Intermediate

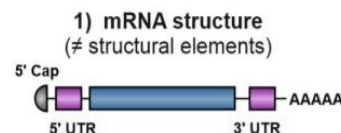
COURSE CODE: MP015

CONTENT PAGES: TBD

QUIZ QUESTIONS: 5

SUMMARY:

- Details To Follow.....



Standard procedures
modified nucleotides
+ purification processes

Genetic Testing: A Basic Review

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Basic

COURSE CODE: MP010

CONTENT PAGES: 13

QUIZ QUESTIONS: 12

SUMMARY:

- Lists the different types of genetic testing.
- Defines informed consent.
- Describes what "Direct to Consumer" testing is.
- Discusses what various genetic test results may mean & the benefits.
- Defines genetic discrimination.
- Recalls whether genes can be patented.
- Explains genetic ancestry testing.



Subscription Course Titles

PCR and Infectious Diseases

BASIC INFO:

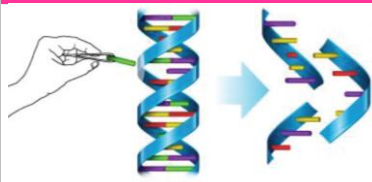
CONTACT HOURS: TBD
COURSE LEVEL: Intermediate
COURSE CODE: MP011
CONTENT PAGES: TBD
QUIZ QUESTIONS: 5

SUMMARY:

- Discusses infectious diseases and the benefits of polymerase chain reaction (PCR).
- Lists the different PCR techniques, including Multiplex PCR, LAMP-PCR, Real-Time PCR, and Digital PCR, and each of their clinical applications in the diagnosis of infectious disease.



Regulatory Concern of PCR Carryover Concern



Enzymatic Method to control contamination

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: MP013
CONTENT PAGES: 9
QUIZ QUESTIONS: 7

SUMMARY:

- Discusses Polymerase Chain Reaction (PCR), PCR-based technologies, and PCR contamination.
- Lists potential sources of contamination in PCR.
- Lists the different methods to control contamination in PCR.
- Discuss the methods to detect contamination in PCR.

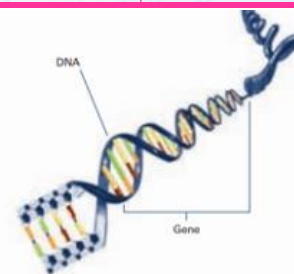
RNA & DNA: A Basic Review

BASIC INFO:

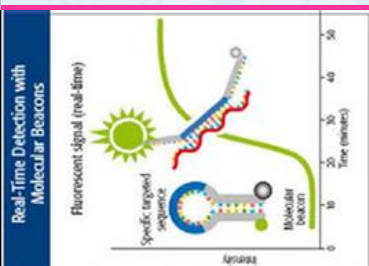
CONTACT HOURS: 2.5
COURSE LEVEL: Basic
COURSE CODE: MP009
CONTENT PAGES: 36 (many pics)
QUIZ QUESTIONS: 12

SUMMARY:

- Describes the structure of DNA and recalls how it replicates itself.
- Describes the processes of meiosis, transcription, and translation.
- Describes the structure of ribosomes and recall what they do.
- Describes what a DNA microarray is and what it can do.
- Lists the differences between RNA and DNA.
- Defines the terms microRNA, RNA interference, gene expression, etc.
- Defines what a telomere is and what its function is.
- Describes what mitochondrial DNA is and where it comes from.



Use of Nucleic Acid Testing in Molecular Diagnostics



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: MP012
CONTENT PAGES: 12
QUIZ QUESTIONS: 11

SUMMARY:

- Recalls the process of PCR.
- Describes the importance of Nucleic Acid measurement in HIV-1.
- Describes how Nucleic Acid Testing is used in other therapeutic areas including, infectious disease, blood screening, genetics, prenatal testing, inherited diseases, and cancer markers.

■ Subscription Course Titles

What is a Genome

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Basic

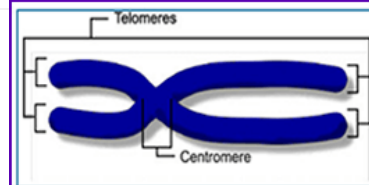
COURSE CODE: MP008

CONTENT PAGES: 18

QUIZ QUESTIONS: 11

SUMMARY:

- Recalls the physical sub-structure of the Human Genome.
- Describes the step by step process that takes genes and turns them into proteins.
- Discusses human genes and their process of switching, transcription, and transmission.
- Recalls the various mechanisms of genetic variation & heredity.



- - - END CATEGORY - - -

Subscription Course Titles

PHLEBOTOMY CATEGORY

LABORATORY TESTING PHASES AND THEIR ASSOCIATED ERRORS

NEW



BASIC INFO:

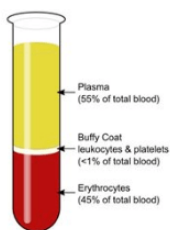
CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: PH009
CONTENT PAGES: 7
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- List the three different phases for Laboratory Testing.
- Discuss the importance of proper specimen ordering, collection, transport, and storage during the Preanalytical phase.
- Discuss the Postanalytical errors, which most commonly include specimen reporting errors.
- Recall the importance of up-to-date procedure manuals and adequate staff training.

Human Blood Composition: Review of Cellular Components

BLOOD COMPOSITION



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: PH007
CONTENT PAGES: 14
QUIZ QUESTIONS: 9

SUMMARY:

- Recalls the composition of Human Blood – liquid & cellular portions.
- Describes a red blood cell (RBC), listing causes of abnormal values.
- Describes where White Blood Cells (WBCs) can be found.
- Lists the five different types of EBCs and discusses the reasons for increased or decreased values of each.
- Describes the purpose of Platelets, listing the causes for abnormal values.

Infectious Complications Caused by Phlebotomy

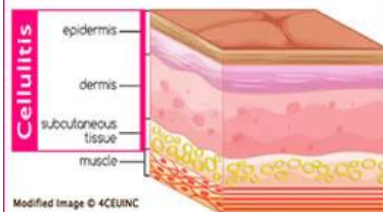
BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Basic
COURSE CODE: PH006
CONTENT PAGES: 18
QUIZ QUESTIONS: 10

SUMMARY:

- List the types of infectious complications that can occur from phlebotomy.
- List the signs & symptoms, laboratory evaluation, and treatment options for cellulitis.
- List the signs & symptoms, laboratory evaluation, and treatment options for abscesses.
- List the signs & symptoms, laboratory evaluation, and treatment options for sepsis and septicemia.
- Recalls the patient risk factors that may contribute to complications.
- Recalls some important infection control measures for safety.

LAYERS OF SKIN AFFECTED BY CELLULITIS



Patient Injuries Caused by Phlebotomy



BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Basic
COURSE CODE: PH005
CONTENT PAGES: 19
QUIZ QUESTIONS: 9

SUMMARY:

- Discusses why phlebotomy injuries occur.
- Describes the injuries that can be caused by tourniquet application.
- Explains what a hematoma is and how it is caused.
- Describes wat compartment syndrome is and the complications it causes.
- Explains phlebitis & thrombophlebitis, describing the symptoms.
- Recalls the signs & symptoms of nerve injury and its prevention.
- Lists the sites that should be avoided during venipuncture.

■ Subscription Course Titles

Preamanalytical Errors in Specimen Collection

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Basic
COURSE CODE: PH008
CONTENT PAGES: 26
QUIZ QUESTIONS: 15

SUMMARY:

- Highlights the three different types of laboratory errors.
- Discusses the laboratory's role in quality specimen collection.
- Lists the different types of preanalytical errors that can occur in specimen collection.



Specimen Collection: A Basic Review



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: PH003
CONTENT SLIDES: 40
QUIZ QUESTIONS: 13

SUMMARY:

- Lists patient identification procedures.
- Discusses the order of draw and its significance.
- Describes proper labelling techniques.
- Describes the proper technique for blood culture collection.
- Discusses collection, equipment, selecting draw sites, etc.
- Discusses capillary collection, including steps, sites, & tips.

- - - END CATEGORY - - -

Subscription Course Titles

SAFETY CATEGORY

Respirator Review

NEW



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SAF012
of Videos: 2
QUIZ QUESTIONS: 10

SUMMARY:

This course consists of 2 videos:

- **Video 1:** Respirator Types.
- **Video 2:** Respiratory Protection for Healthcare Workers.

12 Hours Bloodborne Pathogens Review

12 hrs

PACKAGES ARE **NOT** AVAILABLE IN THE LAB SUBSCRIPTION

*** PACKAGE ***

**12 HOUR
BLOODBORNE
PATHOGENS**



BBP SERIES: Basic Review of the Pathogens

BLOODBORNE PATHOGENS

HIV

HCV

HBV



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: SAF003
CONTENT PAGES: 15
QUIZ QUESTIONS: 12

SUMMARY:

- Lists potential BBPs, recalling the most common ones.
- Lists the transmission routes for BBP.
- Recalls the background, symptoms, incubation period, risk of occupational injury & post-exposure prophylaxis, for HIV, HBV, and HCV.
- Discusses what to do after a BBP exposure.
- Recalls how to minimize having an occupational exposure.

BBP SERIES: Communication Hazards & Recordkeeping

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: SAF008
CONTENT PAGES: 12
QUIZ QUESTIONS: 10

SUMMARY:

- Recalls the importance of Labels & Signs in relation to BBP.
- Discusses training as it relates to BBP and the content that must be provided in the training courses.
- Recalls when and how appropriate training is conducted.
- Discusses the standard requirements for training and medical records.



Subscription Course Titles

BBP SERIES: Exposure Control Plan



BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Basic
COURSE CODE: SAF004
CONTENT PAGES: 18
QUIZ QUESTIONS: 23

SUMMARY:

- Recalls the purpose of the Exposure Control Plan (ECP).
- Recalls how often the ECP must be updated & who should have access.
- Lists the main sections of the ECP.
- Discusses the main areas of the ECP & possible citations when the plan is not followed.

BBP SERIES: HBV Vaccination and Exposure Control Procedures

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: SAF007
CONTENT PAGES: 10
QUIZ QUESTIONS: 10

SUMMARY:

- Recalls the basics of the BBP Standard that focuses on HBV vaccination.
- Discusses the HBV vaccination policies.
- Lists the steps to take during a post-exposure evaluation.



BBP SERIES: HIV and HBV Research Production Facilities



BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SAF006
CONTENT PAGES: 8
QUIZ QUESTIONS: 8

SUMMARY:

- Defines Research Laboratory.
- Recalls the criteria that must be met at research laboratories.
- Recalls the containment equipment used at research laboratories.

BBP SERIES: Personal Protective Equipment | This Course Version Will Be Expiring on 7/1/23

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SAF005
CONTENT PAGES: 8
QUIZ QUESTIONS: 6

SUMMARY:

- Recalls the appropriate use of PPE, including donning & doffing.
- Lists the different types of gloves and describing limitations of each.
- Lists the different types of outerwear, describing their limitations.
- Lists the different types of eye protection, describing their limitations.
- Lists the different types of respiratory protection & their limitations.

EXPIRING



Subscription Course Titles

Biological Safety Cabinets



BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Basic
COURSE CODE: SU020
CONTENT PAGES: 35
QUIZ QUESTIONS: 30

SUMMARY:

- Discusses the purpose of Biological Safety Cabinets (BSC).
- Discusses the functionality of HEPA filters.
- Identifies the mechanical & biological differences of Class I, Class II, and Class III BSCs.
- Lists some general rules to ensure safety when working in a BSC.
- Discusses the maintenance & engineering requirements for BSCs
- Identifies the steps necessary to certify the biosafety cabinets.

CPR Skills Review



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: SA014
CONTENT SLIDES: 48
QUIZ QUESTIONS: 10

SUMMARY:

This course reviews the important steps and techniques used when performing CPR, and the importance of performing the steps correctly. The course includes both video and reading material for review.

THIS COURSE DOES NOT PROVIDE A CPR CERTIFICATION UPON COMPLETION!!

Latex Allergy in Healthcare

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Basic
COURSE CODE: SAF011
CONTENT PAGES: 10
QUIZ QUESTIONS: 10

SUMMARY:

- Recall how natural latex rubber is harvested and manufactured
- Discuss latex products in healthcare, listing examples.
- Recall the clinical reactions to latex, including the symptoms and types of reactions
- Recall how latex allergy is diagnosed.
- Discuss steps that can be taken to manage the disease.



Hand Hygiene



BASIC INFO:

CONTACT HOURS: 2.5
COURSE LEVEL: Basic
COURSE CODE: SAF009
CONTENT SLIDES: 59
QUIZ QUESTIONS: 15

SUMMARY:

- Recalls the birth of hand hygiene.
- Discusses the importance of hand hygiene in relation to healthcare acquired infections (HAIs).
- Recalls when to perform hand hygiene.
- Lists the steps for correctly performing hand hygiene.
- Lists concerns related to hand hygiene.
- Lists hand hygiene facts and "truths worth knowing".

- - - END CATEGORY - - -

Subscription Course Titles

SEROLOGY CATEGORY

VACCINES: A Basic Review

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: S031
CONTENT PAGES: 12
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls the first successful vaccine.
- Recalls the immune cells involved in successful vaccination
- Lists the possible ingredients that may be inside a vaccine.
- Lists the possible side effects of vaccines.
- Lists the different types of vaccines.
- Briefly describes the FDA's oversight role in vaccine development.

VACCINES: COVID-19 Vaccine Review

NEW

BASIC INFO:

CONTACT HOURS: 3.5
COURSE LEVEL: Basic
COURSE CODE: S033
CONTENT PAGES: 25
QUIZ QUESTIONS: 14
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Recalls immune cells involved in successful vaccination.
- Discusses the EUA that allowed vaccine distribution.
- Lists the different types of vaccines, recalling the COVID-19 types available in the U.S.
- Lists the possible side effects of the COVID-19 vaccines.
- Discusses special patient populations that may not be able to take the COVID-19 vaccines



VACCINES: FDA's Oversight Role

NEW



BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Intermediate
COURSE CODE: S032
CONTENT PAGES: 12
QUIZ QUESTIONS: 10
TABLE OF CONTENTS: [View](#)

SUMMARY:

- Briefly recall the FDA's role in vaccine development
- List the Phases in the Clinical Development Process and what happens in each stage.
- Discuss special circumstances in vaccine development, such as an EUA, and when they can be used.

Hepatitis B: Immunity & Prevention Strategies Through Vaccination *

BEING UPDATED

BASIC INFO:

CONTACT HOURS: 4
COURSE LEVEL: Basic
COURSE CODE: S020
CONTENT PAGES: 31
QUIZ QUESTIONS: 31

SUMMARY:

* Check back in early 2022

- Discusses the clinical features & complications of HBV.
- Identifies appropriate lab tests for pre and post vaccine testing.
- Discusses the epidemiology of HBV.
- Lists general characteristics of HBV vaccines.
- Discusses the immunogenicity & vaccine effectiveness among age groups.
- Recalls vaccine schedules & effectiveness among age groups.
- Discusses post-vaccination testing, treatment options for post-exposure.
- Lists contraindications and adverse reactions.



Subscription Course Titles

Immune Principles of Vaccination | Complete this version before Dec 31, 2021

BEING
UPDATED



BASIC INFO:

CONTACT HOURS: 1.5
COURSE LEVEL: Basic
COURSE CODE: S022
CONTENT PAGES: 10
QUIZ QUESTIONS: 10

SUMMARY:

- Recalls what Passive Immunity is and gives examples.
- Recalls what Active Immunity is and gives examples.
- Recalls what Live Attenuated vaccine, Inactivated Vaccine, and Polysaccharide Vaccines are, describing the immune response.
- Describes how a Recombinant Vaccine is made, listing the types of vaccines available.

Immunoglobulin Review – PART I: Immunoglobulin Structure

BASIC INFO:

CONTACT HOURS: 1
COURSE LEVEL: Intermediate
COURSE CODE: SAF011
CONTENT PAGES: 7
QUIZ QUESTIONS: 6

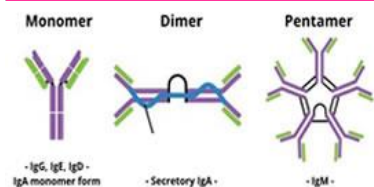
SUMMARY:

- Recalls a brief overview of immunoglobulins.
- Describes the immunoglobulin structure.
- Lists the major components of an immunoglobulin and their function, including heavy and light chains, disulfide bonds, hinge region, and immunoglobulin fragments.
- Describes the antigen-antibody complex and its functions.



Ig
STRUCTURE

Immunoglobulin Review – PART II: Immunoglobulin Types & Uses



Ig TYPES & USES

BASIC INFO:

CONTACT HOURS: 3
COURSE LEVEL: Intermediate
COURSE CODE: S028
CONTENT PAGES: 19
QUIZ QUESTIONS: 20

SUMMARY:

- Recalls a brief overview of immunoglobulins (Ig).
- Describes the immunoglobulin structure.
- Lists the 5 types of immunoglobulins, describing each type.
- Lists disease states that causes elevated and decreased Ig levels.
- Lists the medical applications for antibodies.

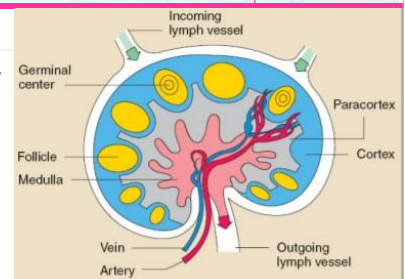
Introduction to Basic Immunology

BASIC INFO:

CONTACT HOURS: 2
COURSE LEVEL: Basic
COURSE CODE: S021
CONTENT PAGES: 16
QUIZ QUESTIONS: 10

SUMMARY:

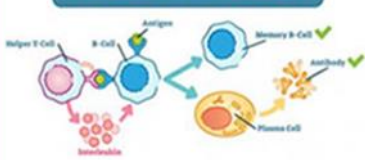
- Identifies the organs that are part of the lymphoid system, recalling their function.
- Recalls the details of Innate Immunity, discussing the cells involved.
- Recalls the details of Adaptive immunity and how T and B cells function.
- Discusses the differences between antibody- vs cell-mediated immunity.
- Describes Passive and Active Immunization.
- Recalls the disorders of a malfunctioning immune system.



Subscription Course Titles

Introduction to Immunology and Immunopathology

B-Cells and T-Cells



BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Basic

COURSE CODE: S029

CONTENT PAGES: 11

QUIZ QUESTIONS: 9

SUMMARY:

- Defines Innate and Adaptive Immunity, listing components of each.
- Compares and contrasts antibody- & cell- mediated immunity.
- Compares and contrasts Passive vs. Active immunization.
- Discusses immunopathology, including: hypersensitivity reactions, autoimmunity, and immunodeficiency.

Toxic Epidermal Necrolysis and Stevens-Johnson Syndrome

BASIC INFO:

CONTACT HOURS: 2

COURSE LEVEL: Intermediate

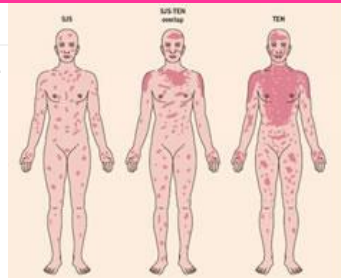
COURSE CODE: S018

CONTENT PAGES: 8

QUIZ QUESTIONS: 12

SUMMARY:

- Recalls the background on TENS & Stevens-Johnson Syndrome (SJS).
- Recalls the epidemiology of TENS and SJS.
- Lists the clinical features, recalling the acute & late phase sequelae.
- Describes the etiology & pathogenesis of TENS and SJS, including genetic susceptibility, drugs, and diagnosis.
- Lists the management and therapy options for treating TENS & SJS.
- Recalls the prognosis for TENS and SJS.



TEN and SJS

Understanding the ABCs of the Immune System



BASIC INFO:

CONTACT HOURS: 2.5

COURSE LEVEL: Intermediate

COURSE CODE: S024

CONTENT PAGES: 20

QUIZ QUESTIONS: 10

SUMMARY:

- Lists areas of the body where immune cells are located.
- Describe the three different types (features) of an immune response.
- Lists the different cells of the immune system, recalling their function.
- Recalls what immune tolerance is.
- Lists the major disorders of the immune system, giving examples of each.

Western Blot: A Valuable Immunoassay

BASIC INFO:

CONTACT HOURS: 3

COURSE LEVEL: Intermediate

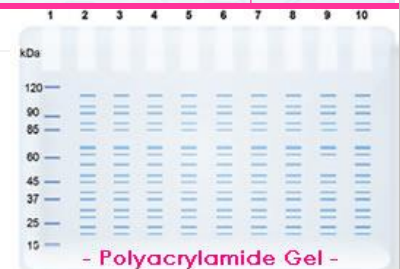
COURSE CODE: S030

CONTENT PAGES: 16

QUIZ QUESTIONS: 20

SUMMARY:

- Recalls a history of the Western Blot (WB) technique.
- Discusses the evolution of the Western Blot technique over time.
- Lists other test methods based on Western Blotting.
- Discusses Western Blot applications.
- Lists other immunoassay methods and the connection with WB.



- - - END CATEGORY - - -

Subscription Course Titles

Understanding this Course Format:



With the Subscription, the purchaser receives the reading material in an online document – PDF file or PowerPoint – and completes the quiz online. For your convenience, one copy of the reading material and quiz may be printed out to work offline or can be saved to a flash drive for future reference. Remember to save a copy of the document **before** completing the quiz. If you choose to read the material offline, you must still return to your online profile and enter the quiz results into the online quiz, where it is graded.

Common Course Questions:

QUESTION: Do you report to Florida's CE Broker?

ANSWER: **Yes.** We report to CE Broker immediately after course completion for all online courses, provided that your license # is in your profile at the time of course completion. Please note, it may take up to 24 hours for CE Broker to post your hours in their system. If you don't see your hours there, please contact our office.



QUESTION: I added my Florida license number after I completed my courses. Will my courses automatically be reported?

ANSWER: **No.** If you were licensed prior to course completion but added your license # after course completion, you will need to contact our office so we can manually report your courses to CE Broker.

QUESTION: What is the length of access for the Subscription package?

ANSWER: 12 months for Individuals purchasing the package and 24 months for those purchasing as part of a group.

QUESTION: Are Combo Courses part of the Subscription package?

ANSWER: **No.** Combo Courses, Packages, and Textbooks are not part of the Subscription package.

QUESTION: What Courses are part of the Subscription package?

ANSWER: All Individual course titles are part of the Subscription package. You pay one price for access to all titles.

QUESTION: How do I print or save a Certificate of Completion?

ANSWER: All browsers are different so there may be multiple ways including: 1) Click the print button in the Adobe Reader. 2) Right Click on the document, then choose print, to print a hard copy OR "print to PDF" to save a PDF copy. 3) Alternatively on phones, you can do a screenshot and save it as an image file.

QUESTION: How can we set up a new Group for our Lab?

ANSWER: [Click here](#) to learn more about Groups, then click on the pink "Register A New Group" button to fill out the form.

LAST REVISED: 9/10/2021