

CPA-Clinical Pathologist Assistant

CPA 605. Advanced Statistics and Data Analysis for Laboratory Medicine. 3 Hours.

Application of advanced statistical principles to laboratory data analysis; emphasis on statistical software selection to aid in data analysis; quality control processes for laboratory analyses, selection, and implementation; application to evidence based medicine practice.

CPA 606. Clinical Laboratory Management in the Health Care Setting. 3 Hours.

Applications of management principles, concepts and policies to the clinical laboratory setting; regulatory and compliance issues in clinical laboratory services, including CLIA 88, Medicare/Medicaid Reimbursement, coding, JCAHO, CAP, OSHA, and quality assurance.

CPA 607. Evidence Based Literature Analysis for Laboratory Professionals. 3 Hours.

Advanced analysis of research-oriented processes, with an emphasis on evidence-based review and synthesis of applicable literature. Principles of effective scientific communication are also addressed.

CPA 608. Laboratory Quality Diagnostic Algorithms. 3 Hours.

Economic, social, regulatory, and professional issues affecting the delivery of cost-effective, quality clinical laboratory services; use of laboratory services in clinical decision making; alternative laboratory service delivery models and mechanisms that promote cost efficiency, appropriate utilization, quality and patient access; use of practice guidelines, critical or clinical pathways, algorithms and reflex testing, direct access testing, evidenced-based practice, and outcomes measurements.

CPA 609. Patient Assessment, Consultation and Interprofessional Communication. 3 Hours.

Introduction to performing patient assessments based on medical history and physical examinations. Proper communication to include navigation of conflict resolutions with medical doctors, nurses, and advanced practice providers.

CPA 650. Advanced Hematology, Hemostasis, and Coagulation Therapy. 3 Hours.

Advanced topics in physiology, disease states, laboratory determinants for red blood cells, white blood cells, platelets, and coagulation; advanced topics in anticoagulation treatments and monitoring.

CPA 651. Advanced Transfusion Medicine and Transplantation. 3 Hours.

Advanced topics in blood products, blood group systems, immunology, physiology and pathophysiology, serologic and molecular testing, transfusion practice, and transplantation.

CPA 652. Advanced Clinical Chemistry. 3 Hours.

Advanced topics in carbohydrates, lipids, heme derivatives, enzymes, proteins, electrolytes, hormones, and vitamins.

CPA 653. Advanced Clinical Bacteriology, Parasitology, and Infectious Diseases. 3 Hours.

Advanced topics in specimen collection and processing, bacterial organisms, antibiotic testing and resistance patterns, fungi, parasites, mycobacteria, and technical methods.

CPA 654. Pharmacology and Toxicology for the Laboratory Professional. 3 Hours.

Clinical application of pharmacology in the management of patients, including frequently prescribed drugs; basic principles of pharmacodynamics, pharmacokinetics, and drug reactions; pertinent physiology and dosing schedules, therapeutic effects, and adverse reactions.

CPA 690. CPA Clinical Internship. 5 Hours.

Exposure to experiences outside the clinical laboratory and issues encountered when dealing with physicians, nurses, and other healthcare professionals. Ability to integrate classroom knowledge into the clinical pathology setting.

CPA 698. Clinical Pathologist Assistant/Non-thesis Project. 1-4 Hour.

Clinical pathology research project which is advisor-guided, student-directed, and designed to support and enhance the student's ability to apply their graduate experience and achieve tangible outcomes.