



## **Course Description**

### **PAS3203C | Surgical Problems and Procedures | 5.00 credits**

During this course the student will be exposed to the various aspects of general, orthopedic, cardiovascular, thoracic, ENT, neurologic, urologic, and pediatric surgical problems, their diagnosis and treatment. Laboratory components of this course will include learning fundamental techniques necessary in preoperative and postoperative care, including nasogastric intubation, central venous line placement, arterial and venous punctures and sterile techniques. Prerequisites: HSA2532, PAS1801C, 1811C, 1812, 1813, 1822C, 1823

### **Course Competencies:**

**Competency 1:** The student will demonstrate proficiency in recognizing and managing general, orthopedic, cardiovascular, thoracic, ENT, neurologic, urologic, and pediatric surgical problems by:

1. Identifying common presenting symptoms for each surgical specialty
2. Differentiating diagnostic approaches based on clinical presentation
3. Interpreting laboratory and imaging results relevant to surgical conditions
4. Formulating initial management plans for acute surgical cases
5. Comparing treatment modalities for various surgical pathologies
6. Evaluating patient progress and response to interventions
7. Integrating evidence-based guidelines into clinical decision-making

**Competency 2:** The student will apply advanced knowledge of preoperative care by:

1. Gathering comprehensive patient histories and conducting physical assessments
2. Reviewing and interpreting preoperative laboratory and imaging studies
3. Explaining preoperative fasting, medication adjustments, and risk reduction strategies
4. Preparing patients for anesthesia and surgical procedures
5. Coordinating care with multidisciplinary teams for optimal surgical readiness
6. Educating patients on expected perioperative experiences and outcomes
7. Ensuring completion of all required documentation and consent forms

**Competency 3:** The student will demonstrate competency in fundamental laboratory and procedural techniques by:

1. Practicing sterile techniques in simulated and clinical environments
2. Performing nasogastric intubation with attention to patient safety
3. Inserting and managing central venous lines under supervision
4. Conducting arterial and venous punctures for diagnostic and therapeutic purposes
5. Monitoring for complications associated with invasive procedures
6. Maintaining accurate records of all procedures performed

**Competency 4:** The student will manage postoperative care and patient recovery by:

1. Monitoring vital signs and recognizing early signs of complications
2. Managing pain and administering prescribed medications appropriately
3. Assessing surgical sites for infection, bleeding, or other adverse outcomes
4. Supporting patient mobility and respiratory function post-surgery
5. Educating patients and families on wound care and activity restrictions
6. Coordinating follow-up appointments and home care instructions
7. Documenting patient progress and communicating with the surgical team

**Competency 5:** The student will integrate critical thinking and clinical reasoning in perioperative patient care by:

1. Analyzing patient data to anticipate potential complications
2. Prioritizing interventions based on patient acuity and surgical risk

3. Collaborating with healthcare professionals to optimize patient outcomes
4. Adapting care plans in response to changing clinical conditions
5. Reflecting on clinical experiences to improve future practice
6. Applying current research and guidelines to perioperative management