

IV Therapy and Blood Withdrawal Hourly Breakdown

Topic breakdown by time.

Topic	Total Time	IV Theory (minutes)	Blood Draw Theory (Minutes)
History & Legal Issues of IV	.5	.5	
Anatomy & Physiology-IV	1	1	
Anatomy & Physiology-Blood	1		1
Equipment of Blood Withdrawal	1		1
IV Solutions & reasons for use	1.5	1.5	
Hyperalimentation: Administration, reasons for use & complications	1	1	
Lipids	1	1	
Complications of IV flow rates	1	1	
Preparing the patient -IV	1	1	
Preparing the patient –Blood	1		1
Selecting a site and protecting the site – IV	1.5	1.5	
Selecting a site and protecting the site – Blood	1		1
Fill in the blanks worksheet	.5	.5	
Fluid System worksheet	.5	.5	
Fluids and Electrolyte worksheet	1.5	1.5	
Computation of IV flow rates, Pumps	1.5	1.5	
History & Legal Issues of Blood Withdrawal	.5		.5
Safety measures & precautions of Blood Withdrawal	1		1
Central / PICC line: equipment & insertion	2.5	2.5	
Transfusion Therapy	1	1	
Complications of IV	2	2	
Complication of Blood Withdrawal	.5		.5
Documentation	1	1	
Trouble Shooting Problems – IV	1	1	
Film Covering IV Insertion Technique	.5	.5	
Total number of hours	27	21	6



IV Therapy and Blood Withdrawal Course Information

Course Name

IV Therapy and Blood Withdrawal

Course Date and Location

This course is held each month at our Tustin, CA campus and online. See the calendar online at genesismec.com.

Instructors

Jacqueline Al-Rauf, RN, CPT2

Julianne Britton, BSN, RN, CPT2

Mousumi Crowley, BSN, RN, CPT2

Tina Martinez, MSN, RN, CPT2

Alice Reybitz, BSN, RN

Instructional Method

This course is taught using hybrid or direct methods. Hybrid instruction includes online and classroom learning. Direct instruction includes face to face in a physical classroom.

Disclosure

This course is not subsidized by any vendor contributions such as expenses, or donation of goods, supplies, or services.

Recommended Reading

The course includes the handbook and all supplies and equipment required for the course.

Supplemental reading includes the following seminal book.

Eugenia M Fulcher; Margaret Schell Frazier, Introduction to Intravenous Therapy for Health Professionals, Saunders Elsevier (2007).

IV Therapy and Blood Withdrawal Course Syllabus

Course Description

The course includes practical lectures to increase knowledge and understanding and hands-on skills practice and testing to sharpen and hone skills. Areas of IV therapy and blood withdrawal covered thoroughly in this combined class include: methods for performing IV therapy/blood withdrawal, basic IV review, safety issues and complications, and advanced theory. Successful students will be issued an IV Therapy and Blood Withdrawal Certificate upon completion all requirements. The classroom didactic class is 27 hours.

Course Objectives

The Course Objectives provides the learning expectations and outcomes expected of students who have mastered the course content.

By the end of the course the student will be able to:

- Discuss the history of venipuncture and blood withdrawal.
- Explain and demonstrate the proper use of universal precautions for infection control.
- List areas of anatomy primarily used in IV therapy and blood withdrawal.
- Name the indications for IV therapy.
- Discuss types of IV fluids and delivery systems for IV therapy and IV fluid flow regulation.
- Discuss indications, administration and potential complications related to fluid and electrolytes, parenteral nutrition and blood products.
- Discuss types of venipuncture/vascular access devices.
- Explain and implement safety measures for vascular access, venipuncture, and blood withdrawal.
- Discuss and monitor for possible complications of vascular access, venipuncture, and skin puncture.
- Choose and prepare appropriate equipment for IV therapy and blood withdrawal.
- Demonstrate safe and effective techniques for IV therapy and blood withdrawal.

Course Outline

The Course Outline provides the details of the curriculum that is taught.

Introduction and Course Requirements

Section 1. History of IV Therapy and Blood Withdrawal

Section 2. Infection Control

Section 3. Equipment and Safety for IV Therapy and Blood Withdrawal

Section 4. Anatomy and Physiology

Section 5. Site Selection

Section 6. Indications for IV Therapy and Blood Withdrawal

6.1 Labs and Therapeutic Withdrawal

Infusions

- 6.2. Fluids and Electrolytes
- 6.3. IV Solutions and IV Fluids Equipment
- 6.4. Calculating Flow Rates, Use of Pumps
- 6.5. Blood/Blood Product Transfusion Therapy
- 6.6. TPN and Lipids

Section 7. Types of IV Devices

- Peripheral Line
- Intraosseous (IO)
- Central Venous Access Device (CVAD)

Section 8. Accessing CVADs

Section 9. CVAD Equipment and Insertion

Section 10. CVAD Risks, Complications and Troubleshooting

Section 11. Choosing Equipment for IV Therapy and Blood Withdrawal.

Section 12. Preparing the Patient for IV Therapy and Blood Withdrawal

Section 13. Procedure and Technique for Peripheral Blood Withdrawal

Skin Puncture

Venipuncture

Section 14. Procedure and Technique for IV Therapy

Section 15. Complications, Risks and Troubleshooting

Section 16. Documentation and Legal Implications

Topic breakdown by time

Subject	Total Time	IV Theory (minutes)	Blood Draw Theory (Minutes)
History & Legal Issues of IV	30	30	
Anatomy & Physiology-IV	60	60	
Anatomy & Physiology-Blood	60		60
Equipment of Blood Withdrawal	60		60
IV Solutions & reasons for use	90	90	
Hyperalimentation: Administration, reasons for use & complications	60	60	
Lipids	60	60	
Complications of IV flow rates	60	60	
Preparing the patient -IV	60	60	
Preparing the patient –Blood	60		60
Selecting a site and protecting the site – IV	90	90	
Selecting a site and protecting the site – Blood	60		60
Fill in the blanks worksheet	30	30	

Fluid System worksheet	30	30	
Fluids and Electrolyte worksheet	90	90	
Computation of IV flow rates, Pumps	90	90	
History & Legal Issues of Blood Withdrawal	40		30
Safety measures & precautions of Blood Withdrawal	60		60
Central / PICC line: equipment & insertion	150	150	
Transfusion Therapy	60	60	
Complications of IV	120	120	
Complication of Blood Withdrawal	30		30
Documentation	60	60	
Trouble Shooting Problems – IV	60	60	
Film Covering IV Insertion Technique	30	30	
Total Number of minutes	1620	1260	360
Total number of hours	27	21	6

Course Schedule

Date	# Hours of Theory	Start time / End time	Total number
Day 1	7 hrs IV / 2 hr BW	7:00 am / 5:00 PM	10 hours 60 min lunch
Day 2	7 hrs IV / 2 hr BW	7:00 am / 5:00 PM	10 hours 60 min lunch
Day 3	7 hrs IV / 2 hr BW	7:00 am / 5:00 PM	10 hours 60 min lunch

Course Evaluation

The course evaluation is comprised of discussion questions, homework, and quizzes. Students must pass all segments of the evaluation to demonstrate mastery of the learning objectives. Minimum passing score is 70%.