## PHLEBOTOMY – UPSKILL PROGRAM

# Certificate, 18 Credit Hours

The Phlebotomy program prepares students for employment as entry-level phlebotomy technicians.

Phlebotomists collect, transport, and process blood and other specimens for laboratory analysis. They identify and select equipment, supplies, and additives used in blood collection and understand factors that affect specimen collection procedures and test results. Recognizing the importance of specimen collection in the overall patient care system, phlebotomists adhere to infection control and safety policies and procedures. They monitor quality control within predetermined limits while demonstrating professional conduct, stress management, and communication skills with patients, peers, and other healthcare personnel as well as with the public.

Phlebotomists are employed in hospitals, physician offices and clinics, medical laboratories, and blood banks as blood procurement specialists.

Course	No.	Course Title	Credits			
		General Education Requirements				
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I				
MATH	100	ELEMENTARY ALGEBRA* or higher	3			
		Total	6			
		Technical Requirements				
HC	114	ANATOMY& PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3			
PH	104	PHLEBOTOMY PRINCIPLES AND PRACTICES	2			
PH	125	PHLEBOTOMY PRINCIPLES AND PRACTICES LAB	2			
PH	131	POINT OF CARE AND FUNDAMENTAL DIAGNOSTICS	2			
PH	132	POINT OF CARE AND FUNDAMENTAL DIAGNOSTICS LAB	1			
PH	165	PHLEBOTOMY CLINICAL	2			
		Total	12			

<sup>\*</sup>Prerequisite: Acceptable ACCUPLACER score or Basic Math.

#### Semester Breakdown Certificate

	First	
	Semester	CR
CIS 105	Microcomputer Software Applications I	3
HC 114	Anatomy & Physiology for the Health Professions	3
MATH 100	Elementary Algebra or higher	3
PH 104	Phlebotomy Principles and Practices	2
PH 125	Phlebotomy Principles and Practices Lab	2
PH 131	Point of Care and Fundamental Diagnostics	2
PH 132	Point of Care and Fundamental Diagnostics Lab	1
PH 165	Phlebotomy Clinical	2
	Total Credit Hours	18

## **Master Syllabus**

Course Number: CIS 105

Course Name: Microcomputer Software Applications I

Credits: 3

Contact Hours: 3 lecture

**Course Description:** This course is an introductory course in software applications which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows, word processing, spreadsheet, database, and presentation software to the student.

Prerequisites: None

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

Materials: PC laptop (see WDT Laptop specifications), Microsoft Office

(contact instructor for correct version), Windows (contact instructor

for correct version), and high-speed Internet

#### **Course Learning Outcomes:**

- Apply word processing, spreadsheet, database, and presentation software skills and concepts to produce professional documents.
- Demonstrate basic computer skills.

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 9 hours per week. 3 of these hours are covered by the class meeting times. The remaining 6 required hours are the

responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** The General Education Outcomes of, critical thinking and computer literacy will be assessed throughout this course.

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### **Master Course Syllabus**

Course Number: HC 114

Course Name: Anatomy & Physiology for the Health Professions

Credits: 3

Contact Hours: 3 Lecture

**Course Description:** Students will gain an introductory understanding of the structure and function of the human body. This course emphasizes concepts essential for student success in health program curriculum as well as in practical, work-related environments.

Prerequisites: None

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

#### **Course Learning Outcomes:**

- Demonstrate knowledge of various types, characteristics, and functions of body tissue; basic body structure; and function and levels of organization
- Describe body directions, planes, and surfaces with the proper anatomical terminology
- Describe the basic structure of cells while relating cellular components to integrated cell function
- Describe the anatomic structure, physiologic function, and regulatory mechanisms of twelve body systems

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 9 hours per week. 3 of these hours are covered by the class meeting times. The remaining 6 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** The student learning outcomes of this course address the following core abilities: analytical skills, communication skills, and technology skills.

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disability who are requesting an accommodation should contact your instructor and the Director of Student Success/Registrar who serves as the Disability Coordinator as early as possible in the semester.

## **Master Syllabus**

Course Number: MATH 100

Course Name: Elementary Algebra

Credits: 3

Contact Hours: 3 Lecture

**Course Description:** This course prepares students for college level-mathematics. Topics generally include: basic properties of real numbers, exponents and radicals, rectangular coordinate geometry, solutions to linear equations, inequalities, and polynomials.

**Prerequisites:** Achieved required score on a national or a Western Dakota Tech

qualifying placement test or passing grade in MATH090.

**Textbook:** http://bookstore.wdt.edu

Materials: Calculator (graphing calculator recommended), pencils, and

erasers

#### **Course Learning Outcomes:**

- Describe the properties of natural numbers, whole numbers, integers, rational and irrational numbers, real numbers, and simplify variable expressions
- Solve equations
- Graph solutions to linear equations and inequalities in two variables
- Solve systems of linear equations and inequalities
- Evaluate and simplify polynomial expressions

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 9 hours per week. 3 of these hours are covered by the class meeting times. The remaining 6 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** The General Education Outcomes of critical thinking and quantitative reasoning will be assessed throughout this course.

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# **Master Syllabus**

Course Number: PH 104

Course Name: Phlebotomy Principles and Practices

Credits: 2

Contact Hours: 2 lecture

**Course Description:** This course introduces students to the practice of phlebotomy and the role of the phlebotomist as part of the healthcare team. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. Special blood collection procedures, safety procedures, quality management, and legal issues are discussed. The importance of professionalism and good communication skills in the patient care environment are stressed.

Prerequisites: None

Co-requisites: PH 125, PH 165

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

Materials: None

#### **Course Learning Outcomes:**

- Describe the phlebotomist's role in the healthcare delivery system including professionalism, quality assurance, and infection control
- Identify the proper phlebotomy theories, procedures, and techniques for collecting venipuncture and capillary specimens based upon the latest CLSI standards
- Demonstrate knowledge of special blood and non-blood specimen collection, specimen processing, and computer applications in the medical laboratory

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 6 hours per week. 2 of these hours are covered by the class meeting times. The remaining 4 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** Students' life skills, social skills, and communication skills will be assessed throughout this course.

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temporary disability related to pregnancy and/or parenting as a result of a medical necessity due to childbirth, WDT will provide reasonable accommodations including but not limited to architectural access, aids and services necessary for effective communication, and modification of its policies and procedures. Students with a disability who are requesting an accommodation should contact your instructor and the Director of Student Success/Registrar who serves as the Disability Coordinator as early as possible in the semester.

## **Master Syllabus**

Course Number: PH 125

Course Name: Phlebotomy Principles and Practices Lab

Credits: 2 Contact Hours: 4 Lab

**Course Description:** This course provides the student with active-learning experiences and hands-on training necessary to develop the skills of an entry-level phlebotomist. The student will learn the procedures performed by a phlebotomist and will become familiar with different types of equipment and techniques applied. Emphasis will be placed on professional behavior, communication skills, personal and patient safety, and technical skill development.

**Prerequisites:** Hepatitis B vaccination (minimum first vaccine of the series)

Co-requisites: PH 104, PH165

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

Materials: Lab coat

# **Course Learning Outcomes:**

- Apply knowledge of professionalism, quality assurance, and infection control when practicing phlebotomy
- Demonstrate competent use of various types of phlebotomy equipment and techniques while performing phlebotomy procedures based upon the latest CLSI standards

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 6 hours per week. 4 of these hours are covered by the class meeting times. The remaining 2 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** Students' life skills, analytical skills, communication skills, teamwork skills, social skills, technology skills and employability skills will be assessed throughout this course.

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## **Master Syllabus**

Course Number: PH 131

Course Name: Point of Care and Fundamental Diagnostics

Credits: 2

Contact Hours: 2 Lecture

Course Description: This course provides training for the clinical lab assistant including lab safety, laboratory procedures, CLIA waived point of care testing and equipment, quality assurance, client services, and specimen collection and processing

Co-requisites: PH 132

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

Materials: Lab coat and calculator

## **Course Learning Outcomes:**

- Identify quality assurance and safety measures to laboratory testing
- Relate various waived laboratory test results to the patient's clinical condition
- Describe various waived laboratory tests and functions within the scope of practice of a laboratory assistant

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 6 hours per week. 2 of these hours are covered by the class meeting times. The remaining 4 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** Students' life skills, analytical skills, communication skills, technology skills, teamwork techniques, and employability will be assessed throughout this course.

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should contact your instructor and the Director of Student Success/Registrar who serves as the Disability Coordinator as early as possible in the semester.

## **Master Syllabus**

Course Number: PH 132

Course Name: Point of Care and Fundamental Diagnostics Lab

Credits: 1
Contact Hours: 2 Lab

**Course Description:** This course provides active learning experiences and hands on training for the clinical lab assistant including lab safety, laboratory procedures, CLIA waived point of care testing and equipment, quality assurance, client services, and specimen collection and processing.

Co-requisites: PH 131

Textbooks: <a href="http://bookstore.wdt.edu">http://bookstore.wdt.edu</a>

Materials: Lab coat and calculator

## **Course Learning Outcomes:**

- Apply quality assurance and safety measures to laboratory testing
- Relate various waived laboratory test results to the patient's clinical condition
- Evaluate quality control for laboratory testing.
- Perform various waived laboratory tests and functions within the scope of practice of a laboratory assistant

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 3 hours per week. 2 of these hours are covered by the class meeting times. The remaining 1 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** Students' life skills, analytical skills, communication skills, technology skills, teamwork techniques, and employability will be assessed throughout this course.

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## **Master Syllabus**

Course Number: PH165

Course Name:

Phlebotomy Clinical

Credits:

2

Contact Hours:

80 clinical hours throughout the course

**Course Description:** The clinical section consists of clinical practice in phlebotomy and laboratory assistant training at various healthcare institutions and laboratories. The program director will coordinate clinical schedules and evaluations.

Co-requisites:

PH125, PH104

Textbooks:

http://bookstore.wdt.edu

Materials:

Program uniform, Trajecsys

#### **Course Learning Outcomes:**

- Demonstrate ability to competently perform all duties of a phlebotomist/laboratory assistant in a clinical setting including accountability and professionalism
- Demonstrate ability to comply with guidelines for quality assurance and quality control in specimen collection, processing, and testing
- Perform minimum 100 competent/effective venous and/or capillary blood collections

Class Commitment: According to WDT Policy 3005, the minimum amount of time that a student needs to devote to this course is an average of 9 hours per week. S of these hours are covered by the class meeting times. The remaining 3 required hours are the responsibility of the student and may include, but are not limited to, homework assignments, reviewing the book or other course resources, and studying for tests. The actual hours spent on individual learning activities will vary from student to student depending on prior knowledge and study skills.

**Assessment:** Students' life skills, analytical skills, communication skills, technology skills, teamwork techniques, and employability will be assessed throughout this course.

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