PLAB 1223/PLAB 1023 Lecture/Lab
Phlebotomy Technician Program
Fall 2006

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Length of Lecture/Lab Component of the Program: 8 Weeks, August 28-October 22
Clinical Component : second 8 week semester, October 23-December 17, 2006

Total Number of Hours: Total number of hours..............................192
  Classroom hours .................................... 16
  Laboratory ......................................... 64
  PLAB 1166/1066 Phlebotomy Practicum........112

Classroom / Laboratory: Classroom/Laboratory: Monday and Wednesday
(Schedule is located at: http://www.austincc.edu/kotrla/phb_sched.htm)
Lecture & Laboratory: 7:30am-12:30pm
Classroom: Cypress Creek Campus Room 4000(portable building)

Blackboard On-Line: A considerable portion of this course will be conducted via the computer on-line Blackboard learning system. All students will be required to have an email address (updated in Blackboard) and are expected to use the computer to access course materials, learning activities, and exams on-line. Students who do not have access to home computers should be prepared to access all materials and take exams at a public computer which are readily available in the Austin area; including those in the Learning Labs and libraries at all ACC campuses. Before taking any on-line exams, students should verify that the computer they are using (and its internet access) will be available to them for the duration of the test.
I. COURSE DESCRIPTION

The profession of phlebotomy is taught through didactic, student laboratory, and clinical experiences. The student will be trained to perform a variety of blood collection methods using proper techniques and precautions including: vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults, children and infants. Emphasis will be placed on infection prevention, proper patient identification, proper labeling of specimens, and quality assurance. Students will be taught specimen handling, processing and accessioning. Students will learn the theory and principles of CLIA waived laboratory tests and perform the tests in the student laboratory. The testing performed will include: manual hematocrits, Urinalysis dipsticks, fecal occult blood, erythrocyte sedimentation rate and pregnancy testing.

II. COURSE GOALS

Upon completion of this program the student will successfully:

A. Demonstrate knowledge of the health care delivery system and medical terminology.
B. Demonstrate knowledge of infection control and safety.
C. Demonstrate basic understanding of the anatomy and physiology of body systems.
D. Associate the major areas / departments of the clinical laboratory with the laboratory tests ordered to evaluate a patient’s pathologic condition / illness.
E. Demonstrate understanding of the importance of specimen collection in the overall patient care system.
F. Demonstrate knowledge of collection equipment, various types of additives used, special precautions necessary and substances that can interfere in clinical analysis of blood constituents.
G. Demonstrate proper techniques to perform venipuncture and capillary puncture.
H. Demonstrate knowledge of pre-analytical errors that can significantly alter results.
I. Demonstrate understanding of requisitioning, specimen transport and specimen processing.
J. Demonstrate understanding of quality assurance in phlebotomy.
K. Demonstrate understanding of the basic concepts of communications, personal and patient interaction, stress management, professional behavior and legal implications of the work environment.

III. SCANS COMPETENCIES

Recently the U.S. Department of Labor established the Secretary’s Commission on Achieving Necessary Skills (SCANS) to examine the demands of the workplace and whether the nation’s students are capable of meeting those demands. The Commission determined that today’s jobs generally require competencies in the following areas.

1. Resources: Identifies, organizes, plans, and allocates resources
2. Interpersonal: Works with others
3. Information: Acquires and uses information
4. Systems: Understands complex interrelationships
5. Technology: Works with a variety of technologies

The Texas Higher Education Coordinating Board is now requiring all degree plans in institutions of higher education incorporate these competencies and identify to the student how these competencies are achieved in course objectives.

In PLAB 1223/PLAB 1023, Phlebotomy, examples of SCANS competencies being incorporated are as follows:

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>Following Standard Precautions, performs vein and capillary puncture procedures using only necessary supplies and within a predetermined reasonable amount of time.</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Demonstrates an understanding of the profession of Phlebotomy thorough ethical behavior when dealing with patients and other members of the health care team, including maintaining a professional appearance to relieve patient anxiety and maintaining patient confidentiality.</td>
</tr>
<tr>
<td>Information</td>
<td>Record quality control results for basic CLIA waived laboratory tests performed and point out unexpected results to a supervisor.</td>
</tr>
<tr>
<td>Systems</td>
<td>Use problem-solving skills to troubleshoot basic equipment or procedures that do not fall within standards, take corrective actions or inform an appropriate supervisor.</td>
</tr>
<tr>
<td>Technology</td>
<td>Perform vein and capillary puncture procedures using a variety of methods and equipment including Vacutainer system, microcollection devices, Winged Infusion Set, and Syringe and needle,</td>
</tr>
</tbody>
</table>

IV. METHODS OF PRESENTATION

1. Lecture and PowerPoint presentation
2. Discussion
3. Demonstration
4. Audiovisual materials
5. Laboratory Practice
6. Clinical practice
V. ESSENTIAL FUNCTIONS

Successful students are those who are highly disciplined, self-motivated, self-reliant and capable of working independently.

Essential functions, as distinguished from academic standards, refer to those physical, cognitive and behavioral abilities required for satisfactory completion of all aspects of the curriculum, as well as the development of professional attributes required by the program officials and clinical faculty of all students upon completion of the program. The essential functions consist of minimal physical, cognitive, affective and emotional requirements to provide reasonable assurance that students can complete the entire course of study and participate fully in all aspects of clinical training.

The Physical Demands required include:

• Project a well-groomed, neat appearance.
• Physical abilities to move about freely and maneuver in small spaces, stand and/or walk for long periods, and access areas within the healthcare facility.
• Physical ability, including sufficient mobility and fine motor coordination, to manipulate phlebotomy equipment to safely collect and process patient specimens, maintain a safe, aseptic work environment, and accurately and safely operate a variety of laboratory equipment.
• Visual ability sufficient to discern colors and perform phlebotomy procedures.
• Visual acuity to read and interpret test requests and physician orders.
• Hearing ability to respond to messages from patients and staff
• Ability to operate computers.

The Cognitive and Affective Demands required include:

• Interpersonal abilities sufficient to communicate in a professional, positive, tactful manner with patients, physicians, nurses, other health care and non-health care employees, and laboratory personnel.
• Establish and maintain effective working relationships including working as part of a team.
• Accurately remember and apply oral and written procedures
• Ability to maintain patient confidentiality and to exercise ethical judgment, integrity, honesty, dependability, and accountability in the performance of one's laboratory responsibilities.
• Maintains accurate records.
• Ability to organize and to assume responsibility for one's work.
• Ability to exercise critical thinking skills to solve problems.

The Emotional Demands required include:

• Emotional stability to allow professional interaction with patients and staff, to respect patient confidentiality, use reasonable judgement and accept responsibility for actions.
• Ability to perform laboratory procedures accurately and quickly even under stressful conditions.
• Ability to exercise independent judgment and to think logically in the performance of one's duties.
VI. MATERIALS REQUIRED
   ACC Bookstore On-line: http://austincc.bkstore.com/
2. Phlebotomy Lecture Guide, Laboratory Manual, Course Objectives/Outline, and Course Schedule available on-line at the course Web site
3. Scrubs - appropriately fitting and professional in appearance
4. 3 inch (or larger) binder with dividers, preferably 7 tabs.
5. Sharpie permanent marker, fine point, black or blue
6. Austin Community College Allied Heath Science Student Name Tag provided by the Program.

VI. MATERIALS RECOMMENDED
2. Medical Dictionary
3. Interpretation of Laboratory Testing

VII. COURSE REQUIREMENTS AND REGULATIONS
1. Attendance Policy

   Important announcements are made at the beginning of class and may not be repeated. Regular and punctual attendance is required at all lecture and laboratory sessions. Class roll will be taken as each student will be required to 'sign in' at the beginning of the class period. A sign-in sheet will be placed at a designated place in the classroom. Upon entering, each student must sign / log in for themselves. If the student must leave before the end of the class/lab, they must log themselves out. Attendance points are awarded only to those students who comply with the attendance policy/procedures: Ten points are credited for punctuality. A student who is fifteen (15) minutes late is considered TARDY. Tardy students (those signing in >15, < 30 minutes late) receive 5 points. Three (3) tardies constitute one absence. It is the student's responsibility to sign themselves in and keep tract of his/her attendance record. Each student is responsible for all assignments, materials, examinations, etc. when absent from the class. Attendance points are calculated (to a percent) and will make up 5% of the lecture grade. Planned or unavoidable absences must be explained to the instructor on or before the day of the absence by telephone or personal visit. All missed laboratory exercises must be completed to verify completion of the objectives, however the amount of credit awarded will be no greater than 80%. Two (2) or more absences, for whatever reasons may be cause to withdraw a student from the course.

2. Dress Code
   Students will be expected to attend class/laboratory and assigned clinical sites clean and neatly dressed in scrubs to present a professional appearance. Students not conforming to the dress code while at clinical may be sent home at the instructor's discretion, and will be required to make up the time. Repeat violations will result in the student being placed on probation.
a. A laboratory coat must be worn buttoned during all laboratory sessions. Disposable lab coats will be provided and are NOT to be worn outside the laboratory area.
b. Appropriate footwear will be required in the campus laboratory and clinical settings. Closed-toe shoes (no sandals or canvas shoes) that are soft-soled, such as white leather-type tennis or similar shoes are strongly recommended.

3. Student’s hair must be clean, neat and of a normal hair color. The hair must be drawn back if longer than shoulder length or hanging in the face. Male students must either shave regularly or if they choose to wear a mustache and/or beard, must keep them clean and well groomed. (No five o'clock shadows.)
4. Students must bathe regularly to avoid offensive odor. In addition, students must refrain from excessive use of cologne / aftershave lotion, or makeup.
5. Keep fingernails clean and at a reasonable length. Reasonable length is defined as 1/8” above the fingertips. Artificial nails are NOT permitted due to infection control issues. The CDC recommended in its hand hygiene guidelines published in Oct. 2002, that “health care personnel should avoid wearing artificial nails and keep natural nails no longer than one quarter of an inch long if caring for patients at high-risk of acquiring infections.”
6. Jewelry should be limited to wedding rings and a wrist watch. A conservative necklace that is kept close to the skin (not dangling) and conservative earlobe earrings (no more than one pair) that do not extend more than ½ inch below the earlobe are acceptable. Wearing of other jewelry must be pre-approved by Program officials.
7. Dress tactfully. Avoid wearing clothes which are overly revealing, which may represent a safety hazard or which may be offensive to patients or laboratory personnel. Scrubs are required on campus and are the preferred attire in clinical.
8. Turn pagers and cell phones OFF or set them to MUTE. It is very disruptive to the learning environment to have these devices go off during class. No CD or MP3 players, such as IPods or similar items, are to be used during class and/or laboratory sessions.
9. Other clothing articles, hats, etc. that may present a safety issue or be disruptive to the learning process will not be allowed. Contact the course instructor if uncertain about the suitability of any item taken into the lab setting.

**ADDITIONAL REQUIREMENTS**

1. **Basic computer skills will be needed to successfully complete the phlebotomy courses.** BlackBoard, an online course delivery system, will be used for discussion, homework submission, taking exams and quizzes, and for enhanced course activities. The Blackboard site is accessed at: [http://acconline.austincc.edu](http://acconline.austincc.edu). Students should visit the "Student Guide - Getting Started with Blackboard" prior to the first class day. Note: Students are generally NOT uploaded into the course until the week before classes start. Students first assignments in Blackboard are to change their email address within Blackboard, and to post an introduction in the "Discussion Board" area.
2. Each student must have an email account. If you do not have Internet access at home a free email account can be obtained through Yahoo. Yahoo accounts can be accessed from any computer connected to the Internet. Computers for student use are located on every ACC campus. Students should expect to conduct regular email communication with Program faculty via email. Students are expected to check their email account at least three (3) times a week and at least once during the weekend for important communications.
3. The "Environment of Care" exams (St. Davids Mandatory Education, & Safe Environment of Care Challenge Exam) as well as the “HIPAA Training Module“ MUST be completed prior to attending the first clinical day. Any student not completing the training modules/exams cannot attend clinical. The modules can be accessed from the ACC Health Science Home Page located on the lower right side of the page at http://www.austincc.edu/health/dmt.php. All parts of the modules must be completed as presented. After completing the HIPAA training the student must print out, sign and submit the “ACC Combined Confidentiality Form”.

4. Completion of "Workplace Violence" module. Sign and return signature page to instructor. This module is available in Blackboard, see “Assignments”, Workplace Violence Module. See course instructor if you have difficulty accessing this module.

5. All students accepted into the Phlebotomy Program must have completed the immunizations required by Texas Law and have a physical examination. Print the Health Data Form. The immunizations must be verified by a physician. The demographic information, emergency contact, and verification of immunizations needs to be completed to meet the requirements for the Phlebotomy program. Go to http://www.austincc.edu/health/dmt.php

6. Only students with a clear Criminal Background check as defined by the ACC Health Science department may register for the course.

7. Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office for Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester” (Student Handbook, 2002-2003, p. 14).

VIII. STUDENT EVALUATION

A. Measurement, Lecture

1. Attendance points are awarded only to those students who comply with the attendance policy (see Attendance Policy above). Attendance points are worth 5% of the lecture portion of the grade. It is the instructor’s decision to award attendance points to any student who leaves the lecture / lab early.

2. Unit pretests (Exam Review Quizzes) will be given over previously covered lecture material and the accompanying laboratory exercises. These pretests must be taken before you take the appropriate examination and can be accessed on-line through Blackboard. They can be taken repeatedly and students must score of 70% on the pretest before qualifying to take the major exam. The scores from these pretests are averaged and worth 5% of the lecture grade.

3. A minimum of four (4) written examinations will be given over lecture and related lab material to comprehensively assess student’s knowledge of concepts, principles, techniques and procedures. These examinations will be given online through BlackBoard. Students are expected to exhibit the highest level of ethical and honest behavior. Students are expected to take all tests at the assigned time or will be given a grade of "0".

4. A comprehensive (all units, both lecture and lab) final exam will be given in class. The score earned on the final exam MUST be within plus or minus 5 points of the students major exam grade average.
5. Points will be awarded for completion of assignments listed in the discussion forum of BlackBoard: http://acconline.austincc.edu.

6. MTS Training Modules: complete the following MTS Training Modules (access them at http://www.medtraining.org):
   1. Introduction to the Clinical Laboratory
   2. Biosafety Chemical Safety
   3. Electrical Safety
   4. Ergonomic Safety
   5. Fire Safety
   6. Orientation to Patient Safety
   7. Basic Phlebotomy
   8. Advanced Phlebotomy
   9. Pediatric Phlebotomy
   10. Specimen Processing

7. Periodic review of your course notebook divided into the following areas: Syllabus, Schedule, Course Objectives, Lecture Guide, Laboratory Manual, Graded Lab exercises, and Graded Study questions.

8. The lecture grade is worth 2/3 of the course grade and is calculated as follows:
   a) Exam Review Quizzes 5%
   b) Examinations = 40%
   c) Final Exam = 40%
   d) Participation in Discussion Forum = 5%
   e) Attendance = 5%
   f) MTS Training Modules = 5%

B. Measurement, Laboratory Experiences

1. Points are awarded for the successful completion of laboratory exercises as related to the specific objectives for each exercise.
2. Points are awarded for proper response to study questions / written assignments required for each laboratory exercise.
3. Points are awarded for the laboratory practical at the end of the semester. The practical is the comprehensive final exam for the laboratory component of the course.
4. The laboratory grade is worth 1/3 of the course grade and is calculated as follows:
   a. Laboratory exercises and Study Questions = 75%
   b. Laboratory Practical Exam = 25%

C. Grading:
   A = 90 - 100%
   B = 80 - 89%
   C = 70 - 79%
   D = 60 - 69%
   F = 59% or below
C. Measurement, Clinical (PLAB 1166 / PLAB 1066) - Complete details are published in the PLAB 1166 Clinical Practicum Syllabus

NOTE: Students MUST be passing the didactic (lecture/lab) course before they are allowed to be assigned to a clinical site. Students who do not pass the PLAB 1223 / PLAB 1023 course WILL NOT be allowed to continue in clinical. It is the student’s responsibility to withdraw from the clinical course if they are not eligible to enter it.

The Clinical Practicum portion of the grade is determined by evaluation by the clinical faculty and communication on a weekly basis by email with the instructor. A student failing the Clinical Practicum component of this course, but passing the lecture and laboratory will NOT be eligible to take the national certification examination.

1. Passing of the clinical component is based on successful completion of clinical objectives, weekly email communication with the instructor during clinical and written evaluations prepared by the clinical instructors.
2. Students must complete and provide documentation for a minimum of 112 clinical hours and must achieve a minimum rating of at least "average" in all areas on the final clinical evaluation.
3. Students must perform and provide documentation of a minimum of:
   a. 100 successful venipunctures
   b. 10 capillary punctures
4. The grade for the Clinical Practicum component of this course will be discussed in the Clinical Syllabus during the orientation to clinical.

IX. PROMOTION, FAILURE AND/OR DISMISSAL FROM THE PROGRAM

A. A minimum grade of "C" (70%) is required in both the didactic (PLAB 1223 / PLAB 1023) and the clinical / practicum (PLAB 1166 / PLAB 1066) courses to be awarded the certificate of completion and be eligible to take the national certification examinations.
B. Students must complete the required number of hours, required number of procedures, and successfully complete all objectives required in the clinical component.
C. Students must successfully complete the classroom and clinical components of the course to receive a certificate of completion. The awarding of the certificate is not contingent upon a student passing any type of external certification or licensure examination.
D. Any student may be withdrawn from the program for excessive absences (see Attendance Policy), and / or consistently failing to meet class assignments, disruptive conduct during lecture or laboratory, or for displaying conduct detrimental to the ethics of phlebotomy, failing to meet minimum competency levels in the clinical component, for violating patient confidentiality/HIPAA violations or violating policies and procedures outlined in the ACC Student Handbook http://www.austincc.edu/handbook/policies4.htm.
E. Acts prohibited by the College for which discipline may be administered include scholastic dishonesty, including but not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations, and homework” (Student Handbook, 2002-2003, p. 32). Violation of the policy may result in probation or immediate dismissal from the program. The Program Director and faculty will evaluate the incident and follow the Progressive Discipline Policy established by the Health Science division.

F. The student may utilize the "Student Grievance Procedure of Austin Community College" in the disposition of a grievance or complaint without fear of recrimination or retaliation.

X. REQUIREMENTS FOR CLINICAL PRACTICE

A. Phlebotomy students must carry liability insurance which will be automatically purchased as part of the payment of the registration fees.

B. Phlebotomy students must show proof of immunization to diphtheria, rubella, tetanus and Hepatitis B prior to attending clinical assignments. Proof of immunization or record of physician-diagnosed illness for rubeola (measles) and mumps must be provided, documentation of a TB test performed within the last 12 months, and immunization or proof of immunity to Varicella (chicken pox).

C. Regular and punctual attendance on all clinical days is required. Absences or tardies from clinical for reasons other than health or emergencies will not be tolerated, and the student may be subject to withdrawal from the program if more than two absences are recorded. All absences, regardless of excuse, must be made up by the student. The student must coordinate the make-up day with the instructor and the clinical site. The student must notify the clinical site and the instructor of all absences or tardies as far in advance as possible or at least within the first hour they are scheduled. A student who is late by 10 minutes or more will be considered officially tardy. Three official tardies will constitute one absence.

D. Students are required to act in a courteous, professional manner at all times during the clinical rotation. Any display of unprofessional, or unethical conduct by the student may result in immediate dismissal from the Program.

E. Service Work Policy- Phlebotomy Technician students are not expected to perform service work and are not allowed to be scheduled in place of qualified staff during the clinical rotation. At some clinical sites students are allowed to perform with minimal assistance, but only after demonstrating competence and under supervision of the clinical site faculty. Should a clinical institution wish to employ a student, or sponsor an employee through the program, they may do so as long as the activities continue to be instructional and students are not allowed to replace qualified staff. This service work is paid according to the standard employee scale of the particular institution and is voluntary on the student’s part. The student must have demonstrated minimum competency by the sponsoring institution and submit this to the program director. A practicing phlebotomist who is taking the course to prepare for the national certification exam may count paid
time as clinical time as a student in the program.

XI. LABORATORY REQUIREMENTS

A. It is the responsibility of the student to prepare for each lecture/laboratory session. Laboratory exercises must be read prior to attending the laboratory period to provide the student with the basic understanding of what will be expected of him/her during the laboratory session.

B. Each student is responsible for his/her own work and for the cleaning up of their work station.

C. Blood, urine, and other biological specimens possibly containing pathogenic organisms will be collected and used in this course, therefore, the following precautions must be observed:

1. Eating, drinking or smoking will not be permitted in the laboratory. Avoid putting objects in your mouth.

2. Wash your hands before leaving the laboratory for any reason. Proper hand washing is essential in preventing the acquisition and spread of potentially harmful organisms.
   a. Wet hands and apply a small amount of an antiseptic soap.
   b. Vigorously lather hands, wash well between the fingers and up the wrists for at least 15 seconds.
   c. Rinse well with a moderate stream of water in a downward motion.
   d. Dry hands with a paper towel and use the towel to turn off the faucet, do not touch the faucet with your hands.
   e. Because frequent hand washing may be very damaging to the skin, frequent application of hand lotion is encouraged.

D. Disinfect work area thoroughly after each laboratory session.
E. Cover spills with paper towels, soak thoroughly with disinfectant and wait 15 minutes before cleaning it up.
F. All accidents are to be reported immediately to the laboratory supervisor/instructor

XII. STANDARD PRECAUTIONS

Since medical history and examination cannot reliably identify the infectivity of all patient's blood and body fluids, precautions against exposure must be followed for all patients. The concept of Universal Precautions was first introduced in 1987 by the Centers for Disease Control & Prevention (CDC) to decrease the occupational risks of blood-borne diseases such as Acquired Immunodeficiency Syndrome (AIDS) and hepatitis B to healthcare workers. Further modifications were made later and the name for this policy was changed to "Standard Precautions". The application of these precautions is continually evolving; all body fluids must be handled with the same precautions as blood.
A. Use barrier protection (gloves, mask, gowns, lab coat, face shield) as necessary to prevent skin and mucous membrane contamination with blood or other body fluids.

B. Gloves must be worn when
   1. cuts, scratches, or other breaks in the skin are present.
   2. performing phlebotomy or capillary blood collections.
   3. anytime it appears that contamination of the hands may occur.
   4. cuts, scratches, or other breaks in the skin are present.
   5. performing phlebotomy or capillary blood collections.
   6. anytime it appears that contamination of the hands may occur.

C. Change gloves after each patient contact or when visibly contaminated with blood.

D. Wear a mask, eye glasses, goggles, or face shield during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of the mucous membranes of the mouth, nose or eyes.

E. Wear a fluid-resistant gown, apron, or other covering when there is a potential for splashing or spraying of blood or body fluids onto the body.

F. Wash hands or other skin surfaces thoroughly and immediately if contaminated with blood or other body fluids.

G. Wash hands immediately after gloves have been removed even when no external contamination appears to have occurred. Organisms on the hands multiply rapidly in the warm moist environment within the glove.

H. Handle laboratory instruments such as needles and scalp bladem with extreme caution.

I. Place used needles, disposable syringes, skin lancets, scalpel blades, and other sharp items into a puncture-resistant biohazard container specially designed for this purpose for disposal. The container should be located as close as possible to the work area. Phlebotomists should carry puncture-resistant containers with them on the phlebotomy tray.

J. Needles must never be recapped, purposely bent, cut, broken, removed from disposable syringes, or otherwise manipulated by hand. The needle safety device must be activated IMMEDIATELY upon removal of the needle from the vein.

K. Place large-bore reusable needles (bone marrow, biopsy needles, etc.) and other reusable sharp objects into a puncture-resistant container for transport to the reprocessing area.

L. Use mouth pieces, resuscitation bags, or other ventilation devices during emergency resuscitation procedures.

M. Exudative lesions or weeping dermatitis should be covered with an occlusive dressing to prevent contamination.

N. All specimens of blood and body fluids should be put in well-constructed containers with secure lids to prevent leaking during transport. Care should be taken when collecting each specimen to avoid contaminating the outside of the container and the laboratory form accompanying the specimen.
O. Fill evacuation tubes, vials, and bottles by using their internal vacuum only. If a syringe is used, *the fluid should be transferred to an evacuation tube by using a safety transfer device* attached to the syringe, puncturing the tube stopper then allowing the correct amount of fluid to flow slowly into the tube along the wall. If a safety transfer device is not available the tube should not be held when puncturing the top, place the tube in a test tube rack, Styrofoam cup or some other suitable holder. Puncture the diaphragm of the rubber stopper and allow the vacuum of the tube to fill the tube. Never force blood into evacuation tube by exerting pressure on the syringe plunger.

P. Decontaminate all laboratory work areas with an appropriate chemical germicide after a spill of blood or other body fluid, and when work activities are completed. Laboratory counter tops should be disinfected at least once per shift.

Q. Rinse off all body fluids from reusable contaminated equipment prior to reprocessing according to the institution's policies.

R. Clean and decontaminate scientific equipment that has been contaminated with blood or other body fluids before being repaired in the laboratory or transported to the manufacturer. Always follow manufacturer's recommendations.

S. Pregnant laboratory workers are not thought to be at greater risk of infection than others in the laboratory. However, if an infection does develop during pregnancy or the mother is a carrier prior to the pregnancy, the infant is at risk of infection by perinatal transmission. therefore, pregnant laboratory workers should be especially aware of universal precautions.

### XIII. PHYSICAL RISK STATEMENT

Students with a temporary physical problem / limitation (i.e., broken bones, back injuries, recent surgery, etc.) may be admitted to, or choose to continue in the Phlebotomy Program. If a student chooses to stay in the Program, he/she understands and agrees that excessive absenteeism or inability to perform necessary duties related to the learning objectives and health care delivery can result in the necessity to discontinue the Program. It is the student's responsibility to obtain, and provide to the instructor, written permission to take part in all course functions from a physician during the period any physical problem / limitation is present. The College is not responsible for any exacerbation of this problem which occurs as a result of the student's continued participation in the Program.

Interactions with clients in the health care system carry inherent risks to both the client and caregiver, including, but not limited to, communicable diseases. In this document, as well as in the curriculum, students will be given information regarding known risks for various diseases and provided skills to implement precautions appropriate to these risks. All students are expected to provide appropriate care to all clients assigned to them in any health care setting as a learning experience. These assignments may include clients with medical diagnoses of tuberculosis, hepatitis, AIDS, or other infectious diseases.
Further more, the student understands that participation in this Program exposes the student to certain risks of illness, injury or infectious contact. The College will not be held responsible for any illness or injury, or infectious contact which occurs during the participation in the Program. The student's signature on the Statement of Understanding page is an acknowledgment of this policy.

XIV. SUGGESTED AUDIOVISUAL PROGRAMS (RVS LIBRARY)
   A. "Laboratory Safety and Infection Control" - QY21 M489
   B. "OSHA Standards on Blood-Borne Pathogens" - WA485 L123
   D. "Blood Collection: The Pediatric Patient" - WB381 B6552
   F. "Blood Collection the Difficult Draw" 25 minutes - EVC WB 381 B6556 CYP RM172 B675
   J. MTS Training modules available online at: http://www.medtraining.org/ .
I have read and understand the PLAB 1223/PLAB 1023 Course Syllabus including:

- _____ Essential Functions
- _____ Non-academic course requirements
- _____ Requirements for Promotion, Failure and Dismissal
- _____ Evaluation Criteria for Lecture, Laboratory and Clinical
- ______ Policies, procedures and requirements for the classroom, laboratory, and clinical, with special emphasis to those referring to safety.

I agree to abide by all of the policies, procedures, and requirements stated within.

Printed Name ________________________________

Signature _________________________________ Date ________________