MLAB 1127

COAGULATION

SPRING 2021

Please Note: Due to extenuating circumstances, including public health issues, course and testing delivery methods, instructional schedules, housing contracts, campus procedures and/or operating hours may be altered, interrupted and/or ceased for a limited or extended period of time. Such changes will be posted on the College website.

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Course Information

MLAB 1127-Coagulation
Placement: Spring semester of the freshman year.

Professor Contact Information

Instructor Name: Aimee Flynn, MS, MT(ASCP) (903) 463-8684
Email: flynna@grayson.edu Office Location: STC 204

Office Hours:
Tuesdays: 1030am – 1200pm
Fridays: 800am – 1200pm

Course Pre-requisites

1. Acceptance into the MLT-AAS Program
2. Consent of the MLT Program Director

Course Description

MLAB 1127. Coagulation. One hour credit. A course in coagulation theory, procedures, and practical applications. Includes laboratory exercises which rely on commonly performed manual and semiautomated methods.

Outcomes

Demonstrate an understanding of all aspects of the coagulation mechanism; describe disease states associated with abnormal coagulation values; perform basic laboratory coagulation analysis. Evaluate laboratory test outcomes and correlate test results with patient condition(s); and evaluate the suitability of clinical specimens.

Course Goals

Upon completion of this course the graduate should be prepared to function as a member of the health care team with the following duties and/or responsibilities:

1. To perform routine coagulation laboratory tests and verify their validity with a quality assurance program in accordance with established standards of service
2. To perform simple instrument maintenance

3. To apply the problem solving approach to distinguish situations that necessitate independent action from those which require referral to a supervisor.
4. To display a professional attitude toward colleagues.
5. To prepare records and transmit results accurately.
6. Observe safety policies and procedures.
7. Participate in continuing education.
8. Project an image of professionalism in appearance and conduct at all times.

INTEGRATION OF SCANS COMPETENCIES
WITH COURSE GOALS, OBJECTIVES, AND ACTIVITIES

SCANS COMPETENCIES AND FOUNDATION SKILLS CIP: 51.1004	MLAB 1201	MLAB 1291	MLAB 1335	MLAB 2331	MLAB 1315	MLAB 1127	MLAB 1311	MLAB 1231	MLAB 2434	MLAB 2401	MLAB 2238	MLAB 2660/1	PLAB 1223	PLAB 1160/1
Resources														
Allocates Time	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Allocates Money	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Allocates Material and Facility Resources	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Allocates Human Resources	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Information														
Acquires & Evaluates Information	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Organizes & Maintains Information	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Interprets & Communicates Information	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uses Computers to Process Information	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Interpersonal														
Participates as a Member of a Team	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Teaches Others	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Serves Clients/Customers	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Exercises Leadership	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Negotiates to Arrive at Decision	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Works with Cultural Diversity	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Systems														
Understands Systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Monitors & Corrects Performance	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Improves & Designs Systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Technology														
Selects Technology	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Applies Technology to Task	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Maintains & Troubleshoots Technology	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Basic Skills														
Reading	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Writing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Arithmetic	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mathematics	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Listening	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Speaking	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thinking Skills														
Creative Thinking	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Decision Making	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Problem Solving	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Seeing Things in The Mind's Eye	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knowing How to Learn	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Reasoning	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Personal Qualities														
Responsibility	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Self-Esteem	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sociability	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Self-Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Integrity/Honesty	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Course Objectives

* Terminal Performance Objectives (TPO):

Upon completion of the assignments and participation in class discussion, the student should be able to answer at least 80% of the questions on multiple choice examinations on the topics covered in MLAB 1127.

* Specific Objectives

Specific objectives are found in the beginning of each chapter in the text.

Course Outline

Ch 15. Overview of Hemostasis & Platelet Physiology
Ch 16. Quantitative & Qualitative Platelet Disorders
Ch 17. Defects of Plasma Clotting Factors
Ch 18. Fibrinogen, Thrombin, & the Fibrinolytic System
Ch 19. Introduction to Thrombosis & Anticoagulant Therapy

Required Textbook

Required:

Ciesla, Betty, Hematology in Practice, 3th ed., Philadelphia, F.A. Davis Co., 2018.
ISBN: 9780803668249 (Hard Cover)

Recommended:

Numerous additional texts covering this topic are available in the MLT library or from the Instructor.

Campus Lab

TPOs

Upon completion of the assignments and practice in Campus Lab the student should:

AFFECTIVE

1. Demonstrate a willingness to prepare for the role of MLT by

    a. arriving for campus lab sessions at the assigned time
    b. observing safety rules and regulations
    c. keeping records
        1) legibly recording results
        2) recording results exactly as determined
        3) keeping all class records current including checklists and progress reports
    d. cooperating with the instructor and fellow students to maintain the campus lab and equipment in good condition

PSYCHOMOTOR

2. Demonstrate the ability to perform laboratory tests by

    a. following written and verbal instructions
    b. demonstrating increasing dexterity in the performance of manual procedures
    c. demonstrating progressive accuracy, precision and speed
    d. obtaining results within the limits set for each test

COGNITIVE

3. Demonstrate knowledge of theoretical concepts involved in the tests performed in campus lab by

    a. recognizing results which do not correlate and reporting them to the instructor
    b. associating unusual test results with the condition or disease which might be indicated

Specific Objectives

Chapter 15: Overview of Hemostasis and Platelet Physiology

1. Describe the systems involved in hemostasis.
2. Describe the interaction of the vascular system and platelets with regard to activation, adhesion and vasoconstriction.
3. Identify the process involved in the coagulation cascade from activation to stable clot formation.
4. Describe the role of platelets in hemostasis with respect to platelet glycoproteins, platelet biochemistry and platelet function.
5. Define the difference between primary and secondary hemostasis.
6. Outline the intrinsic and extrinsic pathways, the factors involved in each, and their role in the coagulation system.
7. List the coagulation factors, their common names, and function.
8. Explain the interaction between the prothrombin time, activated partial thromboplastin time, and factor assays.
9. Identify the relationship of the kinin and complement systems to coagulation.
10. Identify the inhibitors and their role in hemostasis.
11. Define zymogen.

Chapter 16: Quantitative and Qualitative Platelet Disorders

1. Describe the inherited and acquired quantitative platelet disorders.
2. Identify the types of bleeding that are seen in platelet disorders.
3. List four laboratory tests that are helpful in evaluating platelet disorders.
4. State how preanalytic variables may affect the platelet count.
5. Describe the qualitative effects on platelets in the following disorders: Waldenstrom's macroglobulinemia, Multiple myeloma, von Willebrand disease, Bernard Soulier, and Glanzmann's thromasthenia.
6. Identify drugs that are implicated in immune thrombocytopenia.
7. Evaluate conditions that may cause thrombocytosis.
8. Compare and contrast acute versus chronic idiopathic thrombocytopenic purpura.
9. Describe the effect of ristocetin on platelet aggregation.
10. Define hemolytic uremic syndrome in terms of incidence, key clinical features, and patient management.
11. Define thrombotic thrombocytopenic purpura in terms of incidence, key clinical features, and severity.
12. Describe platelet abnormalities due to acquired defects: drug-induced, nonimmune or vascular.
13. Identify characteristics and symptoms associated with post-transfusion purpura and neonatal isoimmune thrombocytopenia.
14. State the cytokine responsible for stimulation of platelet production and the normal amount of platelets produced by a single megakaryocyte per day.

15. Given sufficient information, identify the most probable disorder in a patient case study.

Chapter 17: Defects of Plasma Clotting Factors

1. Describe the variable types of bleeding found in patients with clotting factor deficiencies versus platelet disorders.
2. Define the factor VIII molecule.
3. Outline the genetics of the hemophilia disorders.
4. Describe the symptoms of an individual with hemophilia A and B.
5. Describe the laboratory results of an individual with hemophilia A and B.
6. Describe the management and treatment of an individual with hemophilia A and B.
7. Distinguish the clotting factor disorders with little or no bleeding.
8. Distinguish the acquired factor disorders with regard to symptomatology and treatment.
9. State the probable factor deficiency given a set of laboratory results.
10. Name the most common inherited bleeding disorder.
11. List and describe the laboratory procedures to detect factor disorders and how they are used to differentiate hemophilia types.

Chapter 18: Fibrinogen, Thrombin and the Fibrinolytic System

1. Identify the purpose and components of the fibrinolytic system.
2. Recall the role of fibrinogen in the coagulation and the fibrinolytic system.
3. Describe plasmin in terms of activation and inhibition.
4. Differentiate the role of thrombin in both the coagulation and fibrinolytic system.
5. Outline the inherited disorders of fibrinogen.
6. Describe the laboratory testing for fibrinolytic disorders.
7. Define the conditions that may precipitate disseminated intravascular coagulation.
8. Describe the laboratory testing and management of patients with disseminated intravascular coagulation.

Chapter 19: Introduction to Thrombosis and Anticoagulant Therapy

1. Define thrombophilia and thrombosis.
2. Indicate risk factors associated with inherited and acquired thrombosis.
3. List hemostatic changes responsible for pathological thrombosis.
4. Describe antithrombin, protein C, and protein S with regard to properties, mode of action, factors affected, and complications associated with their deficiencies.
5. List inherited risk factors for thrombosis and their frequency of occurrence.
6. List the most common acquired risk factors associated with thrombosis.
7. Describe activated protein C resistance with regard to pathophysiology, mode of action, and associated complications and associated lab results.
8. Describe heparin-induced thrombocytopenia in regard to the cause, patient’s clinical manifestations, and pathophysiology of the disease.
9. Name the laboratory tests used for the diagnosis of factor V Leiden and heparin-induced thrombocytopenia.
10. List the types of anticoagulant drugs used for the treatment of thrombotic disorders.

11. Explain the mechanism of action of each anticoagulant drug commonly used for the treatment of thrombotic disorders.
12. Name the most common laboratory test used for the monitoring of heparin therapy.
13. Name the most common laboratory test used for the monitoring of Coumadin therapy.
14. State the most common inherited disorder of excess thrombosis.
15. Describe the formation of lupus anticoagulant and its primary coagulation target.
16. Differentiate venous and arterial thrombi.

	Date	Text Material	Assigned Reading	Exams/Lab Exercises
1	Jan 12	Review Syllabus Chapter 15 Lecture	Ch. 15 Questions Due Jan 21	Study clotting cascades
2	Jan 14	***Zoom*** ***Review for Exam 1 @ 8:30 am***		*Quiz – Clotting Cascade*
3	Jan 19	Chapter 16 Lecture	Ch. 16 Questions Due Jan 23	**Online Exam 1 - Chapter 15** ***LockDown Browser***
4	Jan 21			**Online Exam 2 – Chapter 16** ***Open Book***
****5**	Jan 26	Chapter 17 Lecture – *Group 1*	Ch. 17 Questions Due Feb 4	*Laboratory Exercise 1: PT/PTT – Group 1* *Due Tues, Jan 26 at 12pm*
****6**	Jan 28	Chapter 17 Lecture – *Group 2*	Ch. 17 Questions Due Feb 4	*Laboratory Exercise1 : PT/PTT – Group 2* *Due Thurs, Jan 28 at 12pm*
7	Feb 2	Chapter 18 Lecture	Ch. 18 Questions Due Feb 6	**Online Exam 3 – Chapter 17** ***LockDown Browser***
8	Feb 4	**Chapter 19 Lecture** ***Zoom*** ***Review for Exam 4 @ 8:30 am***	Ch. 19 Questions Due Apr 8	*Begin work on Hemostatic Disease Paper* *Medialabinc.net – "Detecting and Evaluating Coagulation Inhibitors and Factor Deficiencies"*
***9**	Feb 9			**In-Class Exam 4 – Ch. 18**

10	Feb 11			**Online Exam 5– Chapter 19** ***Open Book***
11	Feb 16	Platelet Mapping Lecture/ PFA (Extra Study Material Provided) ***Zoom Review – Elsevier @ 8:30 am***	Read and Review Handouts	*Laboratory Exercise 2: Reviewing of Platelet Mapping Reports*
12	Feb 18			**Online Exam 6 – Platelet Mapping/PFA/Review** ***Open Book***
***13**	Feb 23	Automation and Coagulation (Some Extra Study Material Provided)	Textbook reading assignment: Pages 316 – 322 Topic questions due Apr 30	*Lab Exercise 3: Coagulation Tests – Automation* *Due Feb 23* **Online Review Exam 7** ***Comprehensive – Open Book***
14	Feb 25			Make-up Day for Labs *Online Coagulation Laboratory Methodology Quiz*
15	March 2	***Zoom Review – Final @ 8:30 am***		
***16**	March 4			**On-Campus** **Final Comprehensive Exam** **8:30 am – 10:20 am**

*** denotes required attendance**

**** denotes group study – attend when scheduled**

Final Examinations will be administered in the classroom according to the schedule provided in the Grayson College Schedule of Classes and is subject to change with fair notice. Any changes to the Final Exam schedule will be posted as an Announcement in Canvas and given verbally in class.

In the case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, students must log onto Canvas Announcements for directions on where or how to continue their coursework.

Methods of Evaluation

LECTURE: Evaluation may be by written quizzes and examinations. In addition, there will be a final examination in the course.

Attendance will be calculated from the required class attendance days as noted on the semester schedule above.

CAMPUS LAB: Evaluation of these objectives may be by practical or written examination. All other tests will be evaluated by formative means. Campus Lab Report forms will be utilized to determine satisfactory performance in Campus Lab.

GRADING:

Category	*Number*	*% of Total Grade*
Exams	8	85%
Quizzes/Research Paper/Media Lab	4	15%

Laboratory Portion: Must earn a 70% (C average) to earn a Pass (does not count toward point total).
As stated in the MLT Student Handbook: If a student doesn't earn the required 70% exam average, the final grade will default to the low exam average.

Numerical grade values will be equivalent to the following scale:

A = ≥89.5
B = 79.5 - 89.4
C = 69.5 – 79.4
D = 59.5 – 69.4
F = ≤ 59.4

The final grades for the course can be accessed through the Grayson College student portal – they will not be available from the instructor.

Methods of Instruction

MLAB 1127 – Hybrid
Credit Hours: 1.0
Lecture Hours: 0.0
Lab Hours: 3.0

Lecture/discussion and Campus Laboratory will be correlated so that the total laboratory and lecture hours will be utilized to the best advantage.

Visual aids will be available online to reinforce the presented material. Individualized instruction, lab experience, demonstrations and textbooks, and periodicals will be utilized.

The student may be required to do some independent research.

Course Requirements

In order to achieve a passing grade, the following requirements must be met.

1. Cumulative exam average (a grade of 70% or better).
2. Regular attendance for Campus Lab is required. Responsibility for work missed is placed upon the student.
3. A grade of "C" or better is required for graduation.

Course & Instructor Policies

Hybrid Course Information

Communication from the instructor pertaining to ***all*** students will be provided through Canvas Announcements. Individual communications to the instructor should be made through Grayson email. Students shall communicate with each other via personal email.

Online participation will be noted through the submission of assigned video write-ups.

Special Note: Though there are no required discussion boards for this course, should an online discussion environment among students emerge, diversity has many manifestations including diversity of thought, opinion and values. I encourage all students to be respectful of that diversity and to refrain from inappropriate commentary. Should such inappropriate comments occur, I will intervene and disable student ability to utilize the discussion area. In some cases there may be academic disciplinary action. Students should be guided by common sense and basic etiquette. Never post, transmit, promote, or distribute content that is known to be illegal.

Avoid overtly harassing, threatening, or embarrassing fellow students. Also refrain from transmitting or distributing content that is harmful, abusive, racially or ethnically offensive, vulgar, sexually explicit, or otherwise. Class/section norms of conduct may vary, but there is no place where hate speech is tolerated. Never post harassing, racist, threatening, or embarrassing comments. In summary - Be polite!

Grades for the course will be available through Canvas Grade Center.

Students must have reliable access to a personal computer with internet connection that can access Microsoft Office and Canvas. Students must be able to competently navigate these programs and the internet in order to be successful in this course. Other sources of internet connections should be explored as a fallback.

Please see the section “Instructor Policies” regarding the policy for Late Work.

Quizzes

Quizzes are not always regularly scheduled but may be given at the instructor's discretion with or without prior notice. If a quiz is given, the format may be Scantron, so it may be prudent to keep one extra Scantron form on hand in the event of an unannounced quiz.

Paper Exams

Tests will consist of multiple choice questions to be answered in Scantron format as well as short/long answer questions. Students must provide their own Scantron forms as the instructor will have no extras. A test cannot be taken without a Scantron form - no exceptions! The test questions will be taken from topics discussed in class and from the assigned reading.

Random seating will be assigned for tests. Any texting activity during a test will be considered cheating and the test taken up for a zero. All materials will be cleared from the desktops during tests. Cell phones should be put on silent during tests - no exceptions! If you must leave the room to receive an emergency phone call, the instructor must be notified before the student leaves the room. Calculators must be cleared in front of the instructor in order to be acceptable.

You may wait in the break area or in the lab if it is empty. DO NOT CONGREGATE BY THE CLASSROOM DOOR.

In the event of a missed exam, it must be made up in the testing center by the next class period with a 30 point deduction. Regular class time should not be used to take make-up exams. If a missed test is not made up by the next class period, the test grade becomes a zero. Take home exams cannot be made up if missed.

Online Exams

Online exams will be taken through Blackboard. Students are expected to use the honor system and only utilize class-related resources, not other students' work.

The lowest test grade of all exams (except the final) may be replaced by the final exam grade (calculated out of the regular exam value of 100%) if it is higher than the original exam grade. If it is lower, the original exam grade will stay. This is to accommodate unforeseeable absences (ie. illness, car trouble, etc.)

A minimum overall exam average of 70% must be obtained for completion of the course.

Assignments

Additional assignments may be given throughout the semester to aid in further understanding of the material.

Laboratory Exercises

At the conclusion of lecture, the students will be allowed a ten minute break. At the end of the designated break, the students must be in the lab ready to begin. Students arriving after the break will not be allowed to stay. Extenuating circumstances will be considered by the professor.

Each laboratory exercise will have an accompanying pre-lab that is due upon arrival to the lab. It will be handed in complete before the student is allowed to proceed with the lab exercise.

Lab report forms will be filled out for each exercise. The forms will be due the Monday following the week performed by 3pm. No late lab reports will be accepted. Missed labs cannot be made up due to the sensitive nature of the specimens.

Satisfactory performance in the laboratory is required for successful completion of the course. This is determined by achieving at least 49 of the possible 70 points. This will award the student a Pass for the lab component of the course, though the points will not be included in the final grade calculation. They are used only to determine satisfactory or unsatisfactory performance in the lab. Students who are unable to earn at least 49 points from the lab portion will receive a Fail, and a failing grade for the course.

Dress Code Adherence

Students are expected to adhere to the program dress code for all scheduled class days. Students not following the dress code, as determined by the instructor and program policy, will be dismissed from class for the day. This will apply to laboratory and all exam days as well. Extenuating circumstances will be considered and determined by the instructor.

Electronic Devices

Cell phones must be placed on silent for all lectures and tests. If a student must leave the room to answer a call, they should leave and return as quietly as possible with minimum distraction to instructor and fellow students. If cell phone usage becomes excessive, further disciplinary action will be taken by the instructor.

Laptop computers and iPads may be brought to class to type lecture notes. They are to be used for this purpose only and the student may be removed from class if the policy is abused. Any non-class websites may be accessed during class breaks only.

Computer/Internet Problems

Students **must** have contingency plans for computer and Internet problems. Some suggestions include becoming familiar with Internet/free PC usage within your community, or seeking out friends, family, and even coworkers who have Internet services. It is your responsibility to have a backup plan for PC and Internet failure.

*PC and Internet failure is ****not***** an excuse to turn in late assignments or for not accessing the week's PowerPoint.*

Late Work

Late assignments will be accepted through the next Monday with a 25% deduction off the grade. After this time has passed, the assignment will not be accepted. Notify the instructor if an extenuating circumstance arises before the assignment is due so that other arrangements can be made. Notifying the instructor afterwards is unacceptable.

Study Strategies for Students

Each unit of instruction follows a set of learning objectives found within the syllabus. Students, who demonstrate a thorough knowledge of the learning objectives, should score well on exams.

I recommend the objectives be answered during test preparation. It is highly recommended that students attend all lab sessions, pay close attention to instructions, follow procedures, and participate to the fullest extent. It is generally accepted that you will be studying for this (or any MLT course) for one-and-a-half to twice the number of credit hours as the course. For example: MLAB1127 Coagulation is a one hour class and will need approximately one-and-a-half to two hours of study time per week.

Students should not wait until the night before an exam to study. Studies have shown that students who study a certain amount each day are more likely to be successful. It is recommended that students read lecture material before a lecture is given, define unknown

terms and prepare questions to ask the instructor during the lecture. Immediately after a lecture, the student should reread the lecture material and answer learning objectives as if they were study questions.

Tutoring is available to all students for lectures and labs in a course. It is the student's responsibility to file a request for a tutor in the Testing Center, and an appropriate tutor will be located. It is imperative that students request tutoring as soon as the need develops. Do not wait until the last minute to begin needed work. Tutoring for lecture or lab will be scheduled outside of regular class meetings.

Course Attendance and Participation

Academic success is closely associated with regular classroom attendance and course participation.
All successful students, whether on campus or online, are expected to be highly self-motivated.
All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their professors' instructions. Students taking courses during compressed semester time frames such as mini-mester, summer sessions, and mid-semester should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. More than two (2) absences are considered to be excessive. In addition, students' eligibility to receive financial aid or live in a College dormitory can be affected by withdrawal from courses. When withdrawal occurs, any tuition refund would be made in accordance with state regulations

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Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Plagiarism is a form of scholastic dishonesty involving the theft of or fraudulent representation of someone else's ideas or words as the student's original work. Plagiarism can be

intentional/deliberate or unintentional/accidental. Unintentional/Accidental plagiarism may include minor instances where an attempt to acknowledge the source exists but is incorrect or insufficient. Deliberate/Intentional plagiarism violates a student's academic integrity and exists in the following forms:

- Turning in someone else's work as the student's own (such as buying a paper and submitting it, exchanging papers or collaborating on a paper with someone else without permission, or paying someone else to write or translate a paper)
- Recycling in whole or in part previously submitted or published work or concurrently submitting the same written work where the expectation for current original work exists, including agreeing to write or sell one's own work to someone else
- Quoting or copy/pasting phrases of three words or more from someone else without citation, • Paraphrasing ideas without citation or paraphrasing incompletely, with or without correct citation, where the material too closely matches the wording or structure of the original
- Submitting an assignment with a majority of quoted or paraphrased material from other sources
- Copying images or media and inserting them into a presentation or video without citation,
- Using copyrighted soundtracks or video and inserting them into a presentation or video without citation
- Giving incorrect or nonexistent source information or inventing source information
- Performing a copyrighted piece of music in a public setting without permission
- Composing music based heavily on someone else's musical composition.

Campus Lab Terminal Performance Objectives

Upon completion of the assignments and practice in Campus Lab the student should:

1. Demonstrate a willingness to prepare for the role of MLT by:
    a. arriving for campus lab sessions at the assigned time
    b. observing safety rules and regulations
    c. keeping records
        1). legibly recording results
        2). recording results exactly as determined
        3). keeping all class records current including check lists and progress reports
    d. cooperating with the instructor and fellow students to maintain the campus lab and equipment in good condition
2. Demonstrate the ability to perform laboratory tests by
    a. following written and verbal instructions
    b. demonstrating increasing dexterity in the performance of manual procedures
    c. demonstrating progressive accuracy, precision and speed
    d. obtaining results within the limits set for each test
3. Demonstrate a knowledge of theoretical concepts involved in the tests performed in campus lab by:
    a. recognizing results which do not correlate and reporting them to the instructor
    b. associating unusual test results with the condition or disease which might be indicated

INFECTION CONTROL PROCEDURES FOR GRAYSON COLLEGE MLT PROGRAM CAMPUS LAB

* **OBJECTIVE**: After a review of the following material and the Infection Control Procedures for Grayson College MLT Program Campus Lab, the student will practice established safety rules in Campus Lab.

Each laboratory will vary somewhat in established routines, but for the most part all have the same goal. It is essential that all procedures be conducted in a reliable manner.

Personal safety is of the utmost importance. Because many of the clinical specimens may contain highly pathogenic microorganisms, especially viruses, the laboratory can be a hazard to health unless certain rules of conduct are observed. Strict observance of safety rules is mandatory and will minimize exposure to blood-borne pathogens.

1. Hand-to-mouth exposure cannot be overemphasized. If hands are contaminated with blood or reagents, serious illness can be the result. The best rule to follow is never to allow the hands to come in contact with the mouth, face or eyes while conducting procedures.
    a. Smoking is strictly prohibited in the laboratory.

    b. Foods and beverages are not allowed in the laboratory area during labs.

    c. Hands should be thoroughly washed with a disinfectant soap immediately after the completion of any laboratory work.

    d. Mouth pipetting is not allowed.

    e. Closed-toe shoes are mandatory in all laboratory exercises as they also reduce the risk of exposure.

    f. Occasionally a container of blood or serum may be spilled or broken. Disinfectant procedures should be accomplished immediately and the incident reported to the instructor.

        1) Cover the spill with paper towels.

        2) Soak the paper towels with disinfectant and allow to stand for 20-30 minutes.

        3) Wipe up the spill and clean the area with disinfectant.

        4) If broken glass is involved, be care full not to cut your hands.

2. Face shields or safety shields may be used to avoid aerosols.

3. Protective clothing such as buttoned laboratory coats or aprons are essential. The items should be removed when leaving the laboratory for any reason. Gloves should be disposed of in biohazard bags after they have been used.

4. Contaminated materials and samples of blood should be placed in an appropriate container and discarded into a 3CI Box for disposal.

5. Care of all work space and equipment and the maintenance of cleanliness is essential to avoid contaminating laboratory personnel. Bench spaces should be cleaned at the end of each lab session with a suitable disinfectant.

Proper laboratory conduct is really common sense, but its importance cannot be over-emphasized. Many laboratory workers have become seriously infected because the few simple rules of good conduct in the laboratory have not been followed.

CAMPUS LAB EXERCISES:

Campus Lab emphasis will be on basic techniques as well as the theory behind the testing. These Campus Lab exercises have been designed to aid in the achievement of the Campus Lab Terminal Performance Objectives.

EVALUATION:

None of the serology tests performed in Campus Lab have been designated as CRITICAL CRITERIA. A pre-lab and lab report form MUST be completed and turned in for each test performed. See "Method of Evaluation" and "Course Requirements" for the method of calculating the semester grade.

LABORATORY INSTRUCTIONS

BEFORE THE LAB YOU SHOULD:

1) Read the assigned lab exercise procedure and complete the pre-lab. Become familiar with applicable package inserts and your textbook for additional information regarding the test.
2) Use the package insert and your textbook as a reference.

LABS SHOULD BE DONE INDIVIDUALLY. YOU WILL NOT RECEIVE A GRADE WITHOUT A COMPLETED LAB REPORT FORM.

AFTER COMPLETION OF THE LAB:

1) Complete the lab report form.
2) Clean workstation with bleach, replace all materials, and wash hands thoroughly.

TITLE IX:

GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

- Dr. Molly M. Harris, Title IX Coordinator (903)463-8714
- Ms. Logan Maxwell, Title IX Deputy Coordinator - South Campus (903) 415-2646
- Mr. Mike McBrayer, Title IX Deputy Coordinator - Main Campus (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- GC Police Department: (903) 463-8777- Main Campus) (903-415-2501 - South Campus)
- GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College campus-wide student policies may be found on our Current Student Page on our website: http://grayson.edu/current-students/index.html

Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.

Grayson College campus-wide student policies may be found in each Canvas course shell under the menu item "Student Resources".

Revised By: Aimee Flynn
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