**MDLS 4330**

**Supervised Clinical Laboratory Management Experience**

**Course Guide**

**Version 2**



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East Texas Baptist University

Marshall TX

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# Course Audit Form

This form is used to ensure all courses meet requirements for minimal student engagement.

**Course Prefix/Number/Title: MDLS 4330 Supervised Clinical Laboratory Management Experience**

**Semester Hours (check one)**

[ ] 1 Semester Hour (at least 37.5 hours)

[ ] 2 Semester Hours (at least 75 hours)

[ X] 3 Semester Hours (at least 112.5 hours)

[ ] 4 Semester Hours (at least 150 hours)

**Format**

[ ] Face-to-Face [ ]Hybrid [ ]Online [ ]Lab [ ]Other

**Person Completing this Audit:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   **Date:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **ENGAGEMENT (ONLINE ONLY)** | **TOTAL HOURS** |
| Virtual Labs/Online Student Engagement | 113 |
|  |  |
| **TOTAL** | 113 |

## Worksheet #2

ENGAGEMENT TIME ONLINE AUDIT UNIT TOTALS

*The following grids should be completed for each unit of instruction.  Each unit should be customized to the activities in the course for that particular unit.  Please see course audit directions for how to account*

|  |  |
| --- | --- |
| **Total Independent Student Work/Engagement** | 11 |

**Unit 2**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Labs** | 8 |
|  |  |
| **Total Independent Student Work/Engagement** | 10 |

**Unit 3**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | . |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Labs** | 9 |
|  |  |
| **Total Independent Student Work/Engagement** | 11 |

**Unit 4**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | .2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab** | 7 |
|  |  |
| **Total Independent Student Work/Engagement** | 9 |

**Unit 5**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | .5 |
| Formulating discussion post answers | .5 |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 3 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab /Competency Assessment** | 4 |
|  |  |
| **Total Independent Student Work/Engagement** | 8 |

**Unit 6**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | .5 |
| Formulating discussion post answers | .5 |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Log |  |
| Reviewing supplementary material |  |
| **Virtual Lab /Competency Assessment** | 6 |
|  |  |
| **Total Independent Student Work/Engagement** | 9 |

**Unit 7**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | .5 |
| Formulating discussion post answers | .5 |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab /Competency Assessment** | 3 |
|  |  |
| **Total Independent Student Work/Engagement** | 6 |

**Unit 8**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | .5 |
| Formulating discussion post answers | .5 |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab /Competency Assessment** | 7 |
|  |  |
| **Total Independent Student Work/Engagement** | 10 |

**Unit 9**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) | .5 |
| Formulating discussion post answers | .5 |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets |  |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab** | 8 |
|  |  |
| **Total Independent Student Work/Engagement** | 9 |

**Unit 10**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter | 4 |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 1 |
| Tests |  |
| Reviewing supplementary material |  |
| **Virtual Lab /Competency Assessment** |  |
|  |  |
| **Total Independent Student Work/Engagement** | 5 |

**Unit 11**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | 2 |
| Tests |  |
| Reviewing supplementary material |  |
| **Management Project** | 8 |
|  |  |
| **Total Independent Student Work/Engagement** | 10 |

**Unit 12**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter | 1 |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets |  |
| Tests |  |
| Reviewing supplementary material |  |
| **Final Project Paper** | 8 |
|  |  |
| **Total Independent Student Work/Engagement** | 8 |

**Unit 13**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets |  |
| Tests |  |
| Reviewing supplementary material |  |
| **Final Project Paper** | 4 |
|  |  |
| **Total Independent Student Work/Engagement** | 4 |

**Unit 14**

|  |  |
| --- | --- |
| **TASK** | **HOURS** |
| Reading and study time for each chapter |  |
| Formulating initial discussion post (include research time) |  |
| Formulating discussion post answers |  |
| Written Assignment (include research time) |  |
| Coordinating with other team members for group project |  |
| Using a technology tool (blog, wiki) |  |
| Quizzes |  |
| Homework or Worksheets | . |
| Tests |  |
| Reviewing supplementary material |  |
| **Final Project Paper** | 4 |
|  |  |
| **Total Independent Student Work/Engagement** | 4 |

## Worksheet #3

FOR ONLINE AND THE ONLINE COMPONENT OF HYBRID COURSES ONLY ENGAGEMENT TOTALS

*All the totals from Worksheet #2 need to be entered into the grid below.*

|  |  |
| --- | --- |
| **Unit** | **TOTAL TIME** |
| **1** | 11 |
| **2** | 10 |
| **3** | 11 |
| **4** | 9 |
| **5** | 8 |
| **6** | 9 |
| **7** | 6 |
| **8** | 10 |
| **9** | 9 |
| **10** | 5 |
| **11** | 10 |
| **12** | 8 |
| **13** | 4 |
| **14** | 4 |
|  |  |
| **TOTAL** | 113 |

# Notes to Instructor

# Institutional Effectiveness

# The final project for this course is part of IE analysis. Therefore the rubric is mastery ( a number 1-4) rather than a letter grade. 1=D or below, 2=C, 3=B and 4=A.

# A copy of the rubric must be uploaded to each student as part of their feedback. Copies of each rubric must also be sent to the program director.

# In addition the final Capstone project in this course includes ETBU All Program Communicative Fluency Rubric Written. This was also be completed as part of the Capstone grading and returned to the program director.

**Course Information**

## MDLS 4330 Supervised Clinical Laboratory Management Experience

## Course Description

In this course students will be to complete a laboratory management project. In addition, all students will complete all psychomotor competency assessment for their degree.

## Program Outcomes

**National Accrediting Agency for Clinical Laboratory Science (NAACLS) Competencies for a Medical (Clinical) Laboratory Scientist**

At entry level, the medical laboratory scientist will have the following basic knowledge and skills in:

A.\*Application of safety and governmental regulations and standards as applied to clinical laboratory science;

B.\*Principles and practices of professional conduct and the significance of continuing professional development;

C.\* Communications sufficient to serve the needs of patients, the public and members of the health care team;

D. \*Principles and practices of administration and supervision as applied to clinical laboratory science;

E. \*Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services;

F. Principles and practices of clinical study design, implementation and dissemination of results.

In addition at entry level an MLS will have competencies in:

G.\* Pre-analytical, analytical, and post analytical components of laboratory services

H.\* Clinical Chemistry

I. \*Hematology/Hemostasis

J. \*Immunology

K.\* Immunohematology/Transfusion Medicine

L. \*Microbiology

M.\* Urine and Body Fluid Analysis

N. \*Laboratory Operations

\* NAACLS Competencies addressed in this course

**Program Student Learning Outcomes**

At the end of the program of study graduates will be able to:

1. Demonstrate advanced knowledge, technical and diagnostic skills in clinical laboratory science.

2. Integrate and interpret analytical data and establish a course of action to solve analytical problems.

3. Evaluate errors and trends in laboratory testing.

4.\* Develop laboratory management skills in continuous quality improvement, ethics, quality control, fiscal management, human resources and communication.

5. \*Create an environment of safe laboratory practice through standard infection control, chemical safety and general safety practices.

6. \*Comprehend and apply laboratory accreditation standards.

\*Program Outcomes addressed in this course are marked with an asterisk.

## Student Learning Outcomes

**At the end of this course students will be able to:**

1. Value the challenges faced by clinical laboratory managers (AFFECTIVE)

2. Assess laboratory operations in the pre-analytical, analytical and post-analytical phases.

3. Evaluate laboratory management issues.

4. Appreciate the value of communication in laboratory management. (AFFECTIVE)

5. Demonstrate entry level MLS/CLS psychomotor competencies with a score of 70% or above on Laboratory Safety, Parasitology and Molecular methods virtual laboratory assessment. (PSYCHOMOTOR ASSESSMENT)

6. Demonstrate entry level  MLS/CLS psychomotor competencies with a score of 3 or above on a mastery rubric for all completed checklist items as assessed and scored by a laboratory preceptor in Urinalysis, Immunology, Hematology, Microbiology, and Chemistry, Laboratory Safety, and Immunohematology..(PSYCHOMOTOR ASSESSMENT)

## Text(s) and Resources

## **Must be purchased:**

* Hematology Simulation Lab $49 Labster.com
* Urinalysis virtual laboratory at <https://www.teacherspayteachers.com/Product/Urinalysis-Virtual-Lab-5486938>

$2 for license

**Free:**

Virtual Laboratory Parasitology available free at: <http://www.parasite-diagnosis.ch/installedwebmicdataprotozoahelminths1200405844687>

Molecular Techniques <http://vlab.amrita.edu/?sub=3&brch=77>

Lab Safety Virtual Laboratory

Labster.com (FREE)

Microscopy

[https://micro.magnet.fsu.edu/primer/virtual/virtual.html](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmicro.magnet.fsu.edu%2Fprimer%2Fvirtual%2Fvirtual.html&data=01%7C01%7Cchalupa%40etbu.edu%7C631b077bfc334a8bb64908d8643570b9%7Cb790afe0e590426e991082a8b3b12287%7C1&sdata=DE9PcFFqE8hE8A5xAcxL0w%2FETmmReWuZGsmEhkYGeio%3D&reserved=0)

Complete the following:

-Translational Microscopy

-Phase Contrast Microscopy

Blood Typing Virtual Lab

<https://www.newpathonline.com/free-curriculum-resources/virtual_lab/Blood_Typing/13/8,9,10,11,12/1888>

Crossmatching Virtual Laboratory

[https://educationalgames.nobelprize.org/educational/medicine/bloodtypinggame/](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Feducationalgames.nobelprize.org%2Feducational%2Fmedicine%2Fbloodtypinggame%2F&data=01%7C01%7Cchalupa%40etbu.edu%7Ccadb283a78ca49212bf008d8642e2091%7Cb790afe0e590426e991082a8b3b12287%7C1&sdata=5%2FlgxaSI6xutPBRrt6KEg9INiG9BKefxa581aEchxr8%3D&reserved=0)

Chemistry <http://chemcollective.org/vlabs>

Immunology <http://vlab.amrita.edu/?sub=3&brch=69>

Recommended Resources

Dauterman, Phillip. How to be a Lab Director. ISBN 9781985327177 2019 Edition. About $10 only from Amazon---great for project ideas

Just a quick note in Dauterman’s book. He is a pathologist and laboratory director in Saipan. The book is self-published and very inexpensive so it is nothing fancy, but I have not seen another book that is such a great reference book for administrative lab directors and department directors. You just have to bear with some of his personal stories and the fact the chapters are hard to find because there are no page breaks. This is a book to keep because it provides the type of practical information and advice that is not usually found in textbooks.

## Prerequisites

## Admission to the CLS program.

## ALL must submit signed agreement from laboratory or site that is validating student psychomotor prior to the first day of class or the students will be dropped. This agreement is given to students upon admission or for current students during initial registration for this class (MDLS 4330) for current students.

## **If the student has not achieved competency to mastery level in these skills, rrangements will have to be made for remediation which includes the student submitting a signed affiliation agreement with the site for remedial training and additional assessment. The student must complete remediation and successful competency BEFORE the first day of this course.**

## Student Expectations

## Students who have not met these requirements on the first day of class will be dropped and will not be able to sign up for this class again until these requirements are met.

# Course Design Grid

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UNIT** | **DATES** | **COURSE SLOs** | **ACTIVITIES** | **ASSESSMENTS** |
| **1** |  | 2, 6, | Lab Safety Virtual Laboratory  Labster.com (FREE)  Microscopy  [https://micro.magnet.fsu.edu/primer/virtual/virtual.html](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmicro.magnet.fsu.edu%2Fprimer%2Fvirtual%2Fvirtual.html&data=01%7C01%7Cchalupa%40etbu.edu%7C631b077bfc334a8bb64908d8643570b9%7Cb790afe0e590426e991082a8b3b12287%7C1&sdata=DE9PcFFqE8hE8A5xAcxL0w%2FETmmReWuZGsmEhkYGeio%3D&reserved=0)  Complete the following:  -Translational Microscopy  -Phase Contrast Microscopy | **LABORATORY SAFETY/MICROSCOPY VIRTUAL LAB**  **Unit 1 Devotional**  **Unit 1 Assignment 1:**  **Unit 1 Assignment 1: Upload completed psychomotor competency assessments for all disciplines.**  **(Due DAY 1)**  **Unit 1 Assignment 2:** Submit screenshots of virtual laboratory assessment scores for Lab Safety Virtual Lab  **Unit 1 Assignment 3 Psychomotor Skills Reflection** .  In two paragraphs reflect on the psychomotor skills you have validated in microscopy and lab safety. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due 11:59 Sunday |
| **2** |  | 2,6 | **Complete virtual labs:**  Blood Typing Virtual Lab  <https://www.newpathonline.com/free-curriculum-resources/virtual_lab/Blood_Typing/13/8,9,10,11,12/1888>  Crossmatching Virtual Laboratory  [https://educationalgames.nobelprize.org/educational/medicine/bloodtypinggame/](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Feducationalgames.nobelprize.org%2Feducational%2Fmedicine%2Fbloodtypinggame%2F&data=01%7C01%7Cchalupa%40etbu.edu%7Ccadb283a78ca49212bf008d8642e2091%7Cb790afe0e590426e991082a8b3b12287%7C1&sdata=5%2FlgxaSI6xutPBRrt6KEg9INiG9BKefxa581aEchxr8%3D&reserved=0) | **IMMUNOHEMATOLOGY VIRTUAL LABS**  **UNIT 2 Discussion:**  As an MLT you have probably done most of the psychomotor skills in the laboratory including perhaps high complexity testing under the supervision of an MLS. As you move to the MLS level, these skills have to be validated which is one of the primary purposes of this course.  What do you feel you will do differently as an MLS?  Initial post due Thurs 11:59 p.m.  One response due Sunday 11:59 p.m.  **Unit 2 Psychomotor Skills Reflection:** In two paragraphs reflect on the psychomotor skills you have validated in blood typing and crossmatching. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due 11:59 Sunday |
| **3** | 2 | 2, 6 | **Complete virtual lab:**  **Log onto** [**http://www.parasite-diagnosis.ch/foundations**](http://www.parasite-diagnosis.ch/foundations)  **Complete Virtual Lab:**  **1) Foundations Diagnostic Learning Plan**  **2) Complete Virtual Microscope Lab (this will give you the answers)**  **3) Complete Parasites in Brief Quiz (take screenshot of quiz results—you must pass with a 60% or above)** | **PARASITOLOGY**  **Unit 3 Devotional**  **Unit 3 Assignment 1** Complete parasitology virtual laboratory and complete and submit screenshot of quiz results  **Unit 3 Assignment 2 Psychomotor Skills Reflection**  In two paragraphs reflect on the psychomotor skills you have validated in parasitology. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due 11:59 Sunday |
| **4** |  | 2,6 | **Complete Virtual Lab Molecular Techniques**  Simulations are on main page. Create a free account to log in and assess animations  <http://vlab.amrita.edu/?sub=3&brch=77> | **MOLECULAR TECHNIQUES**  **ALL STUDENTS**  Unit 4 Assessment 1: Submit screen shot of virtual lab assessment quiz from AMRITA; must attain a score of 60% or above.  **Unit 4 Assignment 2 Psychomotor Skills Reflection**  In two paragraphs reflect on the psychomotor skills you have validated in molecular techniques. How did this help you improve your skills to ensure you meet minimum competency at the MLS level? |
| **5** |  | 2.6 | **Complete**  **Urinalysis Virtual Lab**  <https://www.teacherspayteachers.com/Product/Urinalysis-Virtual-Lab-5486938> | **URINALYSIS**  **Unit 5 Devotional**  **Unit 5 Interactive Assessment**  **Discuss the linkage between advanced cognitive skills and psychomotor skills at the MLS level in urinalysis.**    **Initial post due Thurs 11:59 p.m.**  **One response due Sunday 11:59 p.m.**  **Unit 5 Assignment**  **Virtual Lab students**  In two paragraphs reflect on the psychomotor skills you have validated in urinalysis. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due Sunday 11:59 end of week 6 |
| **6** |  | 2,6 | Complete Chemistry Virtual Laboratory  <http://chemcollective.org/vlabs>  Complete the following:  Stoichiometry  Equilibrium  Acid/Bases  Oxidation/Reduction  Analytical Chemistry/Lab Techniques | **CHEMISTRY**  **Unit 6 Interactive Assessment**  **Unit 5 Interactive Assessment**  **Discuss the linkage between advanced cognitive skills and psychomotor skills at the MLS level. In chemistry.**    **Initial post due Thurs 11:59 p.m.**  **One response due Sunday 11:59 p.m.**  **Unit 6 Assignment**  In two paragraphs reflect on the psychomotor skills you have validated in chemistry. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due 11:59 Sunday end of week 7 |
| **7** |  | 2,6 | Purchase and complete Hematology Virtual lab at lobster.com | **HEMATOLOGY**  **Unit 7 Interactive Assessment**  **Discuss the linkage between advanced cognitive skills and psychomotor skills at the MLS level in hematology.**    **Initial post due Thurs 11:59 p.m.**  **One response due Sunday 11:59 p.m.**  **Unit 7 Assignment**  **Submit assessment score for Hematology virtual lab.**  **Due 11:59 Sunday end of week 8** |
| **8** |  | 2,6 | **Go to and login into free account you set up previously**  **Virtual Lab I**  <http://vlab.amrita.edu/?sub=3&brch=69>  Simulations are on main page. Create a free account to log in and assess animations  **Complet**e  Latex Agglutinnation  Indirect Elisa  Direct Elisa  Salndwich Elisa  Antiibody Labeling with HRP  Virtual Lab II  Ouchterlong Double Diffusion  Flourescent Labeling of Antibodies | **IMMUNOLOGY**  **Unit 8 Devotional**  **Unit 8 Interactive Assessment**  **Discuss the linkage between advanced cognitive skills and psychomotor skills at the MLS level in immunology.**    **Initial post due Thurs 11:59 p.m.**  **One response due Sunday 11:59 p.m.**  **Unit 8 Assignment**  Complete self-assessment for each module. Continue to take each one until you get 100%. Take a screenshot of each assessment (there are 7 and upload it to the dropbox)  Unit 6 Assignment 2: In two paragraphs reflect on the psychomotor skills you have validated in immunology. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  Due 11:59 Sunday week 9 |
| **9** |  | 2,6 | **Go to:**  <https://learn.chm.msu.edu/vibl/content/oxidase.html>  Complete Gram Stain  Streaking Plates  Differential Media  Biochemical Tests  Antimicrobial Susceptibility | **MICROBIOLOGY**  **Unit 9 Interactive Assessment**  **Discuss the linkage between advanced cognitive skills and psychomotor skills at the MLS level in microbiology.**    **Initial post due Thurs 11:59 p.m.**  **One response due Sunday 11:59 p.m.**  **Unit 9 Assignment** In two paragraphs reflect on the psychomotor skills you have validated in microbiology. How did this help you improve your skills to ensure you meet minimum competency at the MLS level?  **Due 11:59 Sunday end of week 10** |
| **10** |  | 1,3,4 | **Review Dauterman to come up with an idea for a project paper.** | **AFFECTIIVE COMPETENCIES/ MANAGEMENT PROJECT**  **Unit 10 Assignment 1:** Select a topic for your finalmanagement research paper. This needs to address a management or technical issue that laboratory managers need to deal with. This paper must be at least 5 pages single-spaced and all references must be appropriately cited at the end of the paper and in the narrative where they are used. All papers must be double-spaced. The page count does not include the cover and reference page. **This meets the ETBU requirement for Advanced Communication Skills required of all degree programs.**  Due Sunday 11: 59 p.m.  **Unit 10 Assessment 2:** Write an email to a nursing manager indicating that a specimen drawn by the nurse from a port was collected incorrectly and the patient had to be redrawn.  Things to remember: Be courteous, factual and non-judgmental.  Due Sunday 11:59 p.m. |
| **11** |  | 1,3 | **Work on project** | **MANAGEMENT PROJECT AND /PRE, ANALYTICAL AND POST ANALYTICAL ISSUES**  **Unit 11 Devotional**  **Unit 11 Assignment Pre-Post Analytic Homework**  **Select two areas of the laboratory and one procedure in each where you have done actual or virtual psychomotor assessment. What is the most problematic pre-analytical and post analytical problem for each. Why?** |
| **12** |  | 1,3 | **Work on project** | **MANAGEMENT PROJECT**  **Unit 12 Assignment 1: Submit first draft. This should be complete or almost complete (3 pages or more** |
| **13** |  | 1,3 | **Work on project First Draft** | **MANAGEMENT PROJECT**  **Unit 13 Devotional** |
| **14** |  | 1,3 |  | **MANAGEMENT PROJECT**  **Unit 14 Submit Final Management Project** |

# Assessment Instructions

**Unit 1**

**Devotional**

**John 3: 30**

He must become greater; I must become less.

In this verse James is referring to God. However, how does this apply to laboratory management? Who needs to become greater and who must become less?

**Unit 3**

**Devotional**

**Matthew 7:12**

So in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets.

How does this relate to the management of employees?

If you are selecting option 1, discuss the things you hope to learn.

If you are selecting option 2, discuss the project idea you would like to do.  This may change after you meet with your supervisor but this is just to generate ideas.

**Unit 5**

**Devotional**

**Proverbs 27:23**

Be sure you know the condition of your flocks; give careful attention to your herds.

How can you as an employee, department manager, or lab manager take care of your flock?

**Unit 8**

**Devotional**

**Philippians 2:4**

…not looking to your own interests but each of you to the interests of others.

Perhaps one of the biggest challenges of managers in the laboratory is to get their staff to view specimens as an extension of a human being instead of just a tube of blood or

**Unit 11**

**Devotional**

**Philippians 2: 3**

Do nothing out of selfish ambition or vain conceit. Rather, in humility value yourself about others.

How does this verse relate to lab errors?

*Due Sunday 11:59 p.m.*

**Unit 13**

**Devotional**

**1 Timothy 3.2**

Now the overseer is to be above reproach, faithful to his wife, temperate, self-controlled, respectable, hospitable and able to teach.

How does this verse relate to laboratory leadership?

See assessment directions for other assessments above.

# Rubrics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Interactive Assessment Grading Rubric** | | | | | |
| **Criteria** | **Unacceptable**  **D-F Level** | **Acceptable**  **C Level** | **Good**  **B Level** | **Excellent**  **A Level** | **Score** |
| **Frequency**  **5%** | Does not participate | Participates 1-2 times on the same day. | Participates several times but postings not distributed over time | Participates frequently throughout the unit |  |
| **Initial Post**  **25%** | Not completed | Posts adequate assignment with superficial thought and preparation; doesn’t address all aspects of the task. | Posts well developed assignment that addresses all aspects of the task; lacks full development of concepts. | Posts well developed assignment that fully addresses and develops all aspects of the task. |  |
| **Follow-up Postings**  **20%** | Not completed | Posts shallow contribution to discussion (e.g., agrees or disagrees); does not enrich discussion. | Elaborates on an existing posting with further comment or observation. | Demonstrates analysis of others’ posts; extends meaningful discussion by building on previous posts. |  |
| **Content Contribution**  **30%** | Information is incorrect, irrelevant or off topic | Repeats but does not add substantive information to the discussion. | Posts information that is factually correct; lacks full development of concept or thought. | Posts factually correct, reflective and substantive contribution; advances discussion. |  |
| **References and Support**  **15%** | No references or supporting evidence | Uses personal experience, but no references to readings or research. | Incorporates some references from literature and personal experience.  References are from layperson sources | Uses references to literature, readings, or personal experience to support comments. Uses professional and peer-reviewed sources. |  |
| **Clarity, Mechanics and Style**  **5%** | Posts long, unorganized content that may contain multiple errors or may be inappropriate. | Communicates in friendly, courteous and helpful manner with some   errors in clarity or mechanics. | Contributes valuable information to discussion with minor clarity or mechanics errors | Contributes to discussion with clear, concise comments formatted in   an easy to read style that is free of grammatical or spelling errors. |  |
|  |  |  |  | **Total Score** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Management Project** | | | | | |
| **Category** | **Struggling**  **1** | **Average Mastery**  **2** | **Above Average Mastery**  **3** | **Excellent Mastery**  **4** | **Score** |
| **Purpose**  10% | The purpose is not identified. | Information clearly relates to the purpose. Insufficient details are given. | Information clearly relates to purpose. It provides   1-2 supporting details. | Information clearly relates to the purpose. It includes several supporting details. |  |
| **Discussion**  **40%** | The issue was not clearly discussed and supported by literature (if applicable); many key aspects are missing | The issue was somewhat discussed and supported by literature (if applicable); some key aspects are missing | The issue significantly discussed and supported by literature (if applicable); 1-2 key aspects are missing | The issue was completely discussed and supported by literature (if applicable) |  |
| **Analysis**  **30%** | The analysis of the issue was snot well documented; or sources of information or mathematic calculations were not included if applicable | The analysis of the issue was somewhat documented; or sources of information or mathematic calculations were not included if applicable | The analysis of the issue was mostly documented; sources of information or mathematic calculations were included if applicable | The analysis of the issue was well documented; sources of information or mathematic calculations were included if applicable |  |
| **Values Challenges of Laboratory Managers (AFFECT-IVE) 10%** | Did not demonstrate empathy and considerations of management challenges faces by laboratory managers | Mostly demonstrated empathy and considerations of management challenges faces by laboratory managers | Clearly demonstrated empathy and considerations of management challenges faces by laboratory managers | Definitively demonstrated empathy and considerations of management challenges faces by laboratory managers |  |
| **Organization**  **5%** | The information is disorganized. | Organization of information and construction of paragraphs need improving. | Information is organized with well-constructed paragraphs. | Information is very organized with well-constructed paragraphs and subheadings. |  |
| **Mechanics**  **5%** | Many grammatical, spelling, or punctuation errors. | A few grammatical, spelling, or punctuation errors. | Almost no grammatical, spelling or punctuation errors | No grammatical, spelling or punctuation errors. |  |
|  |  |  |  | **Total Score** |  |

# ETBU Written Communication Mastery Rubric (Used for Management Project).

# This will be completed on your final project, but is not used to grade your project. This is used to ensure you have met higher level general education outcomes of written communication.

# 

# Reflection Rubric

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Interactive Assessment Grading Rubric** | | | | | |
| **Criteria** | **Unacceptable**  **D-F Level** | **Acceptable**  **C Level** | **Good**  **B Level** | **Excellent**  **A Level** | **Score** |
| **Identifies Psychomotor Skills Validated**  **25%** | None identified | Identifies one skill | Identifies two skills | Identifies three or more skills |  |
| **Reflective Thinking**  **50%** | The reflection does not address the student’s thinking and/or learning. | The reflection attempts to demonstrate thinking about learning but is vague and/or unclear about the personal learning process.. | The reflection explains the student’s thinking about his/her own learning processes | The reflection explains the student’s own thinking and learning processes, as well as implications for future learning. |  |
| **Analysis**  **20%** | The reflection does not move beyond a description of the learning experience | The reflection attempts to analyze the learning experience but the value of the learning to the student or others is vague and/or unclear. | The reflection is an analysis of the learning experience and the value of the derived learning to self or others.References are from layperson sources | The reflection is an in-depth analysis of the learning experience, the value of the derived learning to self or others, and the enhancement of the student’s appreciation for the discipline. |  |
|  |  |  |  |  |  |
| **Clarity, Mechanics and Style**  **5%** | Many errors; readability poor | Several grammar/style errors; readability adequate | A few grammar/style errors; easily read | Almost no grammar/style errors; very easily read |  |
|  |  |  |  | **Total Score** |  |

# Affective Rubric

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Interactive Assessment Grading Rubric** | | | | | |
| **Criteria** | **Unacceptable**  **D-F Level** | **Acceptable**  **C Level** | **Good**  **B Level** | **Excellent**  **A Level** | **Score** |
| **Courteous** | Tone was not courteous/rude | Tone is mostly polite and courteous | Tone is polite and courteous | Tone is very polite and courteous |  |
| **Demonstrated empathy** | Did not demonstrate empathy |  |  | Demonstrated empathy to others’ position |  |
| **Did not appear biased or judgmental** | Appeared biased or accusatory |  |  | Was not at all judgmental; stated the fact. |  |
| **Proposed potential solution or way he/she could help** | Did not ask if he/she could be of assistance or offered a way he/she could help |  |  |  |  |
| **Used appropriate greeting and title and sender’s signature** | Did not use appropriate greeting and ending signature. |  |  | Used appropriate greeting and ending signature |  |
| **Mechanics** | Several grammar/style errors | Some grammar/style errors | Almost no grammar/style errors | No grammar/style errors |  |

# Determining the Final Grade

|  |  |
| --- | --- |
| **Assessment** | **Percent of Final Grade** |
| Devotionals | 0% |
| Miscellaneous Assignments | 15% |
| Psychomotor Assessments | 65% |
| Management Project | 20% |
| **Total** | **100%** |

**APPENDIX B**

**ADDITIONAL GUIDANCE ON CARNEGIE UNIT EQUIVALENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Usually OCSW or DI\*** | **Method / Modality Unit measured** |  | **Normal Time to Complete \*\***  **(in hours)** |
| Receiving | DI | Virtual Laboratory (e.g., science) per online lab |  | 1 |
| Receiving | DI | Walk/hike (supervised) |  | actual time |
| Receiving | OCSW | Walk/hike (unsupervised) |  | actual time |
| Researching | OCSW | Electronic research (search, narrow results, analyze source) per source |  | 0.5 |
| Researching | OCSW | Group Wiki project per entry - 250 words |  | 0.5 |
| Researching | OCSW | Interview |  | actual time |
| Researching | OCSW | Library research (search, narrow results, analyze source) per source |  | 1 |
| Researching | OCSW | Observation |  | actual time |
| Studying | OCSW | Pre-lab exam studying per lab exam |  | 1.5 |
| Studying | OCSW | Pre-quiz studying per quiz |  | 1 |
| Studying | OCSW | Pre-test studying per test |  | 3 |
| Studying | OCSW | Vocabulary per word / term |  | 0.08 |
| Testing | DI | Online quiz - essay per question - 250 word | s | 0.33 |
| Testing | DI | Online quiz - multiple-choice/T-F per question |  | 0.03 |
| Testing | DI | Online quiz - short answer per question |  | 0.07 |
| Testing | DI | Online test - essay per question - 250 word | s | 0.5 |
| Testing | DI | Online test - multiple-choice/T-F per question |  | 0.05 |
| Testing | DI | Online test - short answer per question |  | 0.08 |
| Writing | OCSW | Analysis paper per page - 250 words |  | 1 |
| Writing | OCSW | Annotated bibliography per annotation |  | 0.33 |
| Writing | OCSW | Case study per page - 250 words |  | 1 |
| Writing | OCSW | Creative writing per page - 250 words |  | 1 |
| Writing | DI | Discussion board / Forum with direct instructor participation per post - 250 words |  | 0.42 |
| Writing | OCSW | Discussion board / Forum without direct instructor participation per post - 250 words |  | 0.42 |
| Writing | OCSW | Genogram per generation |  | 2 |
| Writing | OCSW | Graphic org / Concept mapping / Mind map |  | 1.5 |
| Writing | OCSW | Journal / Blog writing per entry - 250 words |  | 0.5 |
| Writing | OCSW | Lab notebook and report (pre- and post-lab) per lab |  | 1 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category** | | **Usually OCSW or DI\*** | **Method / Modality Unit measured** |  | **Normal Time to Complete \*\***  **(in hours)** | |
| Writing | | OCSW | Lesson / sermon / speech writing per min of finished work | | 0.25 | |
| Writing | | OCSW | Peer-evaluation (e.g., of posted work) per page - 250 words |  | 0.75 | |
| Writing | | OCSW | Reflection paper per page - 250 words |  | 0.5 | |
| Writing | | OCSW | Report (video, field trip, tour, interview, lab, etc.) per page - 250 words |  | 0.5 | |
| Writing | | OCSW | Research / Term paper - lower-level per page - 250 words |  | 1 | |
| Writing | | OCSW | Research / Term paper - upper-level per page - 250 words |  | 1.5 | |
| Writing | | OCSW | Résumé and cover letter |  | 2 | |
| Writing | | OCSW | Self-evaluation per page - 250 words |  | 0.42 | |
| Writing | | OCSW | Student course evaluation per evaluation |  | 0.25 | |
| Writing | | OCSW | Textbook chapter outline - lower-level per chapter |  | 1 | |
| Writing | | OCSW | Textbook chapter outline - upper-level per chapter |  | 1.5 | |
| Writing | | OCSW | Textbook chapter questions - lower-level per chapter |  | 1 | |
| Writing | | OCSW | Textbook chapter questions - upper-level per chapter |  | 1.5 | |
| \* "OCSW" indicates a method that is usually considered outside-of-class student work (Section C); "DI" indicates a method that is usually considered direct instruction (Section B). Direct Instruction is any method/modality that satisfies three criteria: (1) planned and directly aligned with educational objectives/outcomes; (2) actively facilitated by the instructor, which could be through guidance, monitoring, etc.; and (3) graded and documented.\*\* “Normal time to Complete” is the amount of time an average student would require | | | | |

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