MLT 280 Clinical Microbiology

Catalog Description: MLT 280 Clinical Microbiology (3-4-4)
This course consists of the role of pathogenic bacteria and other microorganisms which will
include bacterial culturing, differentiation and identification of human normal flora and disease-causing microorganisms.

Prerequisite: Admission into the MHPC MLT Program; successful completion of required
general education pre-requisite courses, grade of “C” or better; minimum cumulative GPA of
2.5; successful completion of each course during each semester required in the MHPC MLT
program, grade of “C” or better.

Text:
Tille, P., Bailey and Scott’s Diagnostic Microbiology, 14th edition. Elsevier

Other Required Materials: Handouts, videos, training aids and transparencies as provided by the
instructor. Library assignments, periodicals, computerized modules, and guest speakers may be
used as appropriate.

Purpose of the Course: The purpose of this course is to assist MLT students in acquiring a
foundation of knowledge and skills in clinical microbiology. With this foundation, and after a
practical training period, they should be able function competently in the clinical microbiology
laboratory.

Course Learning Outcomes:
1. Differentiate the microorganisms, parasites, and medically important fungi
   frequently encountered in the clinical laboratory.
2. Select appropriate media for microorganism identification and sensitivity studies.
3. Demonstrate safety and organization skills necessary for functioning in a clinical
   laboratory.
4. Monitor quality control in all laboratory procedures.
ASSESSMENT OF STUDENT LEARNING:

In both the didactic and the laboratory portions of the course, if applicable, the student must achieve 78% or greater. Failure to achieve this minimum score will result in dismissal from the program. In the laboratory portion of the course, the final grade will be recorded as “Pass” or “Fail” and registered with the didactic portion.

The following grading scale applies to all programs within the Missouri Health Professions Consortium MLT Program:

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100 – 92%</td>
<td>A</td>
</tr>
<tr>
<td>83 – 91%</td>
<td>B</td>
</tr>
<tr>
<td>78 – 82%</td>
<td>C</td>
</tr>
<tr>
<td>66 – 77%</td>
<td>D</td>
</tr>
<tr>
<td>65% and below</td>
<td>F</td>
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In the lecture portion of the clinical course, the final grade is derived from student performance on examination(s) and/or assignments.

Grading/student assessment of lecture (didactic) portion of the course:

Final grade will be composed of:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Unit tests averaged</td>
<td>60%</td>
</tr>
<tr>
<td>Quizzes, case studies, study questions, or other assignments, attendance and punctuality averaged</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grading/student assessment of laboratory (student laboratory) portion of the course, if applicable:

Final PASS/FAIL grade will be composed of:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Laboratory Exercises averaged</td>
<td>30%</td>
</tr>
<tr>
<td>Professional Behaviors Evaluation</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
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Expected Study Time Commitment

Students should expect to spend approximately 2 to 4 hours per week studying, reading, and working on assignments for each registered credit hour. For example, 6 to 12 study hours per week may be expected for a 3 credit hour class.

Program Assessment:

The MHPC MLT Program continually strives to meet the needs of the Medical Laboratory Technician student through program improvements. This is a cooperative effort that includes input from the faculty, student, Medical Laboratory Technician Advisory Board, and other appropriate agencies or entities. Students are assessed on mastery of the course concepts and essential skills throughout the courses of the Medical Laboratory Technician Program. Other program assessments include clinical performance criteria, essential skills mastery, the clinical process evaluation, ASCP examination scores, placement rates, and follow-up surveys.

Program Outcomes:

1. Demonstrate knowledge of laboratory professional practice by providing safe, effective and accurate laboratory test results while maintaining patient confidentiality.
2. Utilize established laboratory procedures taking into consideration the application of scientific principles, technical skills for operation and maintenance of laboratory equipment, and relationship of laboratory findings to disease states to ensure appropriate patient diagnosis and treatment.

3. Employs professional conduct and communication skills with patients, families, laboratory personnel, healthcare team members, and the community as a medical laboratory technician.

4. Participate in professional development activities valuing the importance of continuous learning in laboratory medicine.

5. Comply with Federal, OSHA, and laboratory safety procedures for the well-being of the patient, healthcare team, self and community.

INSTRUCTOR POLICIES:

Please see student handbook for a complete list of all detailed program policies.

Academic Dishonesty
Attendance:
Email:
Cell Phones & Texting:
Canvas:

COLLEGE POLICIES

Attendance Policy: Students are expected to attend all class sessions for which they are enrolled. Each College reserves the right to drop or withdraw students from courses due to lack of attendance.

Students need to be aware that dropping/being dropped from a course and their last date of attendance in the course may impact their financial aid.

Faculty are required to track attendance and report lack of attendance. An instructor must complete the appropriate steps to drop a student within one week following the student’s violation of the attendance policy. Additionally, a student’s attendance rate will be calculated based upon the first day the academic session begins (not the student’s date of enrollment in the course). If a student does not attend a course as defined below, the student will be dropped as “Never Attended.”

Term Length Drop Calculations

| 16-week: Any student who misses two (2) consecutive weeks of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course. |

Acceptable justification may include, but is not limited to, family emergencies, illness or injury, college-approved co-curricular and extra-curricular activities, and religious holidays.

Definition of Course Attendance

| Virtual Course | Being present, via appropriate platform, for scheduled class meetings/activities |

| 3 |
Hybrid Course

Physically attending scheduled, face-to-face, class meetings and active participation in the online portion of the course which may include any or all of the following:

- Completion of quizzes or exams during class meetings and online
- Submission of assignments during class meetings and online
- Participation in discussions during class meetings and online

Simply logging into the Learning Management System (Canvas) and/or accessing the course and course related material does not constitute active participation for the online component of hybrid courses or for online courses. (Policy Handbook, I.090 & M.095)

Americans with Disabilities Act (ADA)

It is the intent of the MHPC MLT Program that compliance with the Americans with Disabilities Act shall be a high priority. Appropriate changes will be made and accommodation provided to qualified individuals with disabilities, unless doing so would pose an undue burden on the institution’s resources or would fundamentally alter the nature of a program.

Students who have disabilities that qualify under the Americans with Disabilities Act (ADA) should register with their home campus if requesting accommodations and/or assistance. All members of the Missouri Health Professions Consortium comply with ADA guidelines. If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please notify the course instructor immediately and/or contact the Access/ADA Office at your college to confidentially discuss disability information, academic accommodations, appropriate documentation and procedures. The MHPC cooperating colleges provide accommodative services for students who qualify. Accommodation services are individualized in an attempt to provide the most appropriate services for the needs of the student.

Students may register for assistance through their respective home campuses. College contact information is listed below:

East Central College:
Paul Lampe, Director of Advising and Counseling, Access and Disability Services, 636-584-6581, paul.lampe@eastcentral.edu

Mineral Area College:
Access Office/Disability Services, 573-518-2152, 5270 Flat River Road, Park Hills, Missouri, 63601.

Moberly Area Community College:
Columbia campus, Parkade Center, Room 119, (573) 234-1067 x 12120, Stacy Donald, Director of Access/ADA Services at StacyDonald@macc.edu

North Central Missouri College:
Megan Pester, Accessibility Services Coordinator, Alexander Student Center mpester@mail.ncmissouri.edu, 660-359-3948 Ext 1405

State Fair Community College (SFCC Regulation 1210):
Director of Human Resources, Hopkins Student Services Center, (660) 596-7484, or Dean of Student and Academic Support Services, Hopkins Student Services Center, (660) 596-7393. The Hopkins Center is located on SFCC’s Sedalia campus at 3201 W. 16th St., Sedalia, MO 65301.

Three Rivers College:
Student Services Specialist/Coordinator of Disability Services (573)840-9605

Notice of Non-Discrimination

The Missouri Health Professions Consortium and its member institutions do not discriminate on the basis of race, color, national origin, ancestry, gender, age, disability, veteran status, and marital or parental status in admissions, programs and activities, and employment. Inquiries concerning nondiscrimination should be directed to the following respective college representatives:
East Central College:
   Vice President of Student Development, 131 Buescher Hall, telephone number 636-584-6565 or stnotice@eastcentral.edu

Mineral Area College:
   Office of the Dean of Students, 573-518-2154, or Access Office/Disability Services, 573-518-2152, 5270 Flat River Road, Park Hills, Missouri, 63601.

Moberly Area Community College:
   Office of Student Services, 101 College Avenue, Moberly, Missouri 65270, 660-263-4110, ext. 11239

North Central Missouri College:
   Chief of Staff, North Central Missouri College, 1301 Main, Trenton, MO 64683, (660) 359-6203 or kharris@mail.ncmissouri.edu

State Fair Community College (SFCC Regulation 1210):
   Director of Human Resources, Hopkins Student Services Center, (660) 596-7484, or Dean of Student and Academic Support Services, Hopkins Student Services Center, (660) 596-7393. The Hopkins Center is located on SFCC’s Sedalia campus at 3201 W. 16th St., Sedalia, MO 65301. Inquiries also may be directed to the U.S. Department of Education, Office of Civil Rights at OCR.KansasCity@ed.gov.

Three Rivers College:
   Student Services Specialist/Coordinator of Disability Services (573)840-9605 located in the Welcome Center in the Bess Student Center, Poplar Bluff, MO 63901

Title IX Statement:
MACC maintains a strict policy prohibiting sexual misconduct in any form, including sexual harassment, sexual discrimination, and sexual violence. All MACC employees, including faculty members, are considered mandated reporters of sexual misconduct and as such are expected to contact the Title IX Coordinator when they become aware, in conversation or in writing, of an incident of sexual misconduct. For more information on this policy or to learn about support resources, please see http://www.macc.edu/sexual-misconduct-policy or contact Cheryl Lybarger, MACC’s Title IX Coordinator, at 660-263-4110, ext. 11369 or cheryll@macc.edu.