

We are glad you have chosen to major in Medical Technology. You should obtain the following information:

**From Your Advisor:**

1. A curriculum sheet
2. Information regarding credit for previous course work
3. A plan for progression through the curriculum
4. A tentative completion date

**MTC Policies Prior to Practicum:**

- A. During the junior year, the student must complete nine medical technology (MTC) courses:

MTC 301/301L	Professional Communications
MTC 302/302L	Clinical Bacteriology I lecture/lab
MTC 306/306L	Fundamentals of Hematology lecture/lab
MTC 309/309L	Clinical Chemistry I lecture/lab
MTC 315	Introduction to Clinical Immunology

- B. The Department repeat policy: A grade of C or above must be made in all junior-level MTC courses. If a student fails to make the required grade, the repeat policy is as follows:

1. A student may repeat one junior-level MTC course to improve the grade.
2. A second repeat (for a total of two) of a junior-level course will require specific permission of the Department. To obtain permission, the student must present a justification in person before the faculty of the Department. A majority vote of the faculty is required for permission to be granted.
3. Only under unusual circumstances will a student be allowed to repeat more than two junior courses. To obtain permission, the student must present a justification in person before the faculty of the Department. A majority vote of the faculty is required for permission to be granted.

- C. MLT students who have an Associate Degree and hold certification as a Medical Laboratory Technician (or equivalent) from a nationally recognized certifying agency are exempt from taking the MTC courses prior to the Practicum, as long as their transcript documents equivalent courses taken as part of the junior/community college program and a grade of C or above was obtained in each MLT course.

- D. MTC Prerequisite Requirements are:

Admission to Junior Level MTC courses or Basic Masters courses: A minimum GPA of 2.0 overall and a C or better in College Algebra and General Chemistry lectures and laboratories are required for entrance to junior level of basic masters courses.

MTC 202 and 203 are corequisites or prerequisites to the first MTC junior level course. Students must make a C or above in these courses.

MTC 302/502: **Clinical Bacteriology I.** Prerequisites: MTC 300/300L or 500/500L or MTC 202 and 203, BSC 110/110L, BSC 380/380L or permission of instructor. Corequisite: MTC 302L/502L. (Offered Spring Only)

MTC 302L/502L: **Clinical Bacteriology I Laboratory.** Prerequisite: MTC 300/300L or MTC 500/500L or MTC 202 and 203, BSC 110/110L, BSC 380/380L or permission of instructor. Corequisite: MTC 302/502. (Offered Spring Only)

MTC 306/506: **Fundamentals of Hematology.** Prerequisite: MTC 300/300 or MTC 500/500L or MTC 202 and 203, BSC 110/110L. Corequisite: MTC 306L/506L. (Offered Spring Only)

MTC 306L/506L: **Fundamentals of Hematology Laboratory.** Prerequisite: MTC 300/300L or MTC 500/500L or MTC 202 and 203, BSC 110/110L. Corequisite: MTC 306/506. (Offered Spring Only)

MTC 309/504: **Clinical Chemistry I.** Prerequisite or Corequisite: MTC 300/300L or MTC 500/500L or MTC 202 and 203. Prerequisite: CHE 420/420L or permission of instructor. Corequisite: MTC 309L/504L. (Offered Fall Only)

MTC 309L/504L: **Clinical Chemistry I Laboratory.** Prerequisite or Corequisite: MTC 300/300L or MTC 500/500L or MTC 202 and 203. Prerequisite: BSC 110/110L, CHE 420/420L or permission of instructor. Corequisite: MTC 309/504. (Offered Fall Only)

MTC 315/515: **Introduction to Clinical Immunology.** Prerequisite or Corequisite: BSC 110/110L, MTC 300/300L or MTC 500/500L or MTC 202 and 203, or permission of instructor. (Offered Fall Only)

- E. If number of applicants for the Practicum exceeds Practicum class size, acceptance will be based on GPA, with higher GPAs given preference.
- F. Student preferences for hospital assignments will not be requested. The affiliated hospitals include Forrest General Hospital, Hattiesburg; Memorial Hospital, Gulfport; and Singing River Hospital, Pascagoula. The Hospital assignment procedure is described in the Student Policy Manual.

- G. Each student has final responsibility to ascertain that he or she has complied with all applicable catalogue requirements for graduation. Faculty advisors assist students in developing their programs, but these advisors cannot waive or vary degree requirements as they appear in the University Bulletin. Each student is permitted to preregister for MTC courses but final permission to take the class depends upon successfully meeting all requirements and adequate student enrollments.
- H. Documentation that you have received Hepatitis B vaccination is required for entrance into the Practicum. If upon consultation with a physician, specific conditions exist which are medically recognized contraindications, you should consult the Program Director for a Certificate of Medical Exemption. It is highly suggested that vaccination be completed prior to the junior year. Three injections are required over a six month period with cost of approximately \$40 per shot.
- I. Students from cooperating high schools can earn up to twenty (20) hours with no more than eight (8) hours or two (2) courses in one subject-matter area through the College Board's Advances Placement Testing Program. Through the 1986 AP Testing year, a score of 3 or 4 will yield three (3) hours credit; a grade of 5 will yield a six (6) hours credit. Beginning with the 1987 AP Tests, a score of 2 or above will yield three (3) hours credit, and a score of 4 or 5 will yield six (6) hours credit. Departments may require higher scores. (For the AP Biology test only, a score of 3 or below will receive no credit; a score of 4 or above will receive eight (8) hours of credit). The awarding of credit will be administered by the Office of Admissions. USM Bulletin.
- J. Student enrolling in and graduating from a Medical Technology program must meet the essential function requirements of the academic program and the profession. Essential Functions are the non-academic standards that a student must be able to master to participate successfully in the MT program and become employable\*. Examples of this program's essential functions are provided below. If you are not sure that you will be able to meet these essential functions, please consult with the Department Chairperson for further information.

### **Essential Visual and Observation Skills for Medical Technology**

#### **The Medical Technology student must be able to:**

- observe laboratory demonstrations in which biological (i.e., body fluids, culture materials, tissue sections, and cellular specimens) are tested for their biochemical, hematological, immunological, microbiological, and histochemical components.
- characterize the color, odor, clarity, and viscosity of biologicals samples, reagents, or chemical reaction products.
- utilize a clinical grade binocular microscope to discriminate among fine structural and color (hue, shading, and intensity) differences of microscopic specimens.

- read and comprehend text, numbers, and graphs displayed in print and on a video monitor.
- recognize alarms.

### **Essential Motor and Mobility Requirements for Medical Technology**

#### **The Medical Technology student must be able to:**

- perform laboratory testing adhering to existing laboratory safety standards.
- perform moderately taxing continuous physical work, often requiring prolonged sitting and/or standing, over several hours.
- travel to assigned clinical laboratory practicum sites.
- reach laboratory benchtops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.
- grasp, hold, transport, utilize specimens, reagents, hazardous chemicals and equipment in a safe manner as needed to perform laboratory testing.
- obtain patient specimens in a timely, safe, and professional manner (e.g. perform phlebotomy).
- use laboratory equipment (e.g. pipettes, inoculating loops, test tubes) and instruments to perform laboratory procedures according to established laboratory guidelines.
- use a computer keyboard to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.
- troubleshoot and correct basic equipment malfunctions.

### **Essential Communication Requirements for Medical Technology**

#### **The Medical Technology student must be able to:**

- read and understand technical and professional materials (i.e. textbooks, journal articles, handbooks, and instruction manuals).
- follow oral and written instructions independently.
- clearly instruct patients regarding specimen collection.

- demonstrate sensitivity, confidentiality and respect when speaking with patients.
- communicate clearly, accurately and tactfully with faculty members, student colleagues, staff and other health care professionals orally and in a recorded format (writing, typing, graphics, or telecommunications).

### **Essential Intellectual Requirements for Medical Technology**

#### **The Medical Technology student must be able to:**

- comprehend, measure, calculate, reason, integrate, analyze, evaluate, correlate, problem-solve and compare.
- recognize abnormal laboratory results (e.g. patient and QC) and take appropriate action.
- demonstrate critical-thinking and judgment skills appropriate to a given situation.
- independently prepare papers, prepare laboratory reports, and take paper, computer, and laboratory practical examinations.

### **Essential Behavioral Requirements for Medical Technology**

#### **The Medical Technology student must be able to:**

- organize work and perform multiple tasks within given time constraints and under stressful conditions while maintaining the ability to communicate clearly.
- be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints.
- possess the emotional health necessary to effectively apply knowledge and exercise appropriate judgment.
- be able to provide professional and technical services while experiencing the stresses of task-related uncertainty (i.e., ambiguous test order, ambivalent test interpretation), emergent demands (i.e. "stat" test order), and distracting environment (i.e., high noise levels, crowding, complex visual stimuli).
- be flexible and creative and adapt to professional and technical change.
- recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals.
- adapt to working with unpleasant biologicals.
- support and promote the activities of fellow students and of health care

professionals. Promotion of peers helps furnish a team approach to learning, task completion, problem solving, and patient care.

- be honest, compassionate, ethical, and responsible. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept and act on constructive criticism, and look for ways to improve (i.e., participate in enriched educational activities).
- show respect for individuals of different age, ethnic background, religion, and/or sexual orientation.
- exercise independent judgement and accept responsibility for own work.

In addition, the student must follow all established policies and procedures of the program and clinical affiliate sites.

\* Certain disabilities may limit employment opportunities. Moreover, immunocompromised individuals may put themselves at personal risk due to exposure to infectious agents that occur in all aspects of the laboratory.

K. Healthcare Criminal History Background Affidavit:

All students must complete a notarized Healthcare Criminal History Background Affidavit. This affidavit will be required the semester prior to going to the assigned clinical affiliate (Phase II). The affidavit will be given to the assigned clinical affiliate who will review the affidavit for eligibility of the student to attend the assigned clinical affiliate. If a student has a felony conviction, the student may not be able to complete the degree because the student may not be able to perform the clinical experience. Felonies by the current law are: possession or sale of drugs, murder, manslaughter, armed robbery, rape, sexual battery, child abuse, arson, grand larceny, burglary, gratification of lust, aggravated assault, felonious abuse, and/or battery of vulnerable adult or sex offenses listed in Section 45-33-23 Mississippi Code of 1972. A student may be denied clinical assignment if no affiliated hospital accepts the student based on this affidavit. Questions regarding this requirement should be addressed to the Program Director preferable prior to entering Phase I of the program.

- L. Graduation requirements must be met under a catalog which is not more than six years old at the time of the student's graduation (exclude the current year's catalog in counting the six) and which carries announcements for a year during which the student earned some credit at the University of Southern Mississippi or another accredited institution of higher learning including community/junior colleges. USM Bulletin.

- M. Credit by Examination is described in the USM Bulletin. The Department allows credit to be earned under a. College Level Examination Program: General Examination; b. College Level Examination Program: Subject Area Examination; c. Advanced Placement Program; d. Challenge Examination. If a student documents previous work

experience in medical technology or previous knowledge through college level courses, the Program Director in consultation with medical technology faculty may approve a student to sit for challenge examinations in medical technology courses: MTC 101, MTC 202, MTC 203, MTC 309/309L or MTC 504/504L, MTC 306/306L or MTC 506/506L, MTC 302/302L or MTC 502/502L, MTC 315 or MTC 515. The student must register for the challenge examinations as described by the University and pay the fee. The student must make 80% or higher to successfully challenge these courses.

- N. Applicants with foreign degrees are processed through the Office of International Admissions who obtain GPA, TOEFL, GRE (where applicable), transcripts, and evaluation of foreign educational credentials. Admission requirements for International Students are listed in the USM Bulletin. Application information is sent to the department and the Program Director transfers courses listed on the evaluation to the course planning sheet. A schedule for obtaining course work prior to the practicum is then prepared.
- O. Regardless of courses taken previously, if English is not the native language of any student, evidence of English proficiency must be provided prior to admission into the Practicum. The MTELP (Michigan Test of English Language Proficiency) requirement is "Proficiency II" and is preferred by the department. Alternately, a TOEFL of 550 may be accepted. In addition, a score of 4 ("functional language skills") must be earned on a fluency test administered by the English Language Institute. This fluency test is specifically designed to determine listening and speaking skills with respect to situations and language expected during the Practicum phase of the program. To take the Oral Proficiency Interview, a student should contact the English Language Institute. A fee is charged for the oral interview.
- P. The official record is maintained in the registrar's office and a student may access a student copy of the transcript on Soar. An official transcript may be obtained by submitting a written request and paying the appropriate fees to the Registrar's office. Students with picture identification may access their department records by submitting a request in writing to the Program Director. Records may not be removed from the Medical Technology Department office and must be observed in the department office in the presence of the Program director or Senior Faculty Member. Health records must be accessed through the USM Clinic.
- Q. If two years have lapsed since a junior course has been taken, the student must revalidate the course either by repeating the course or making 80% or higher on a test or tests regarding the material in the course. The student should see the Department Chairperson, the individual instructor, or the medical technology advisor to start the revalidation process.
- R. In MTC courses (including courses in the junior year, Phase I and Phase II), students work with the following hazards:
- patient and prepared specimens that contain live organisms, including:

- bacteria, viruses, fungi and parasites (biohazardous materials)
- chemicals
- laboratory equipment/glassware
- gases including volatiles, flammables
- radiation
- electrical equipment

Working with any of the above agents entails risks. These risks include, but are not limited to, contracting disease, contracting infections, and injury from laboratory equipment. The risk of contracting diseases and/or infections, which could be serious or even fatal, is significantly increased in individuals whose immune system (body defenses) is impaired.

Persons with immune system deficiencies include those individuals who currently are undergoing chemotherapy, taking immunosuppressive drugs (such as corticosteroids), have diabetes, have autoimmune disease (such as lupus erythematosus or multiple sclerosis), and/or positive for HIV. Students who know or suspect they may have an abnormal immune response, should consult a physician as to the advisability of enrolling in the Medical Technology program at the present time.

Any student who elects to continue in the Medical Technology program, after being advised of the hazards, knowingly and consensually assumes all risks.

Students will be advised regarding clinical laboratory safety procedures during MTC 202 or equivalent, during each MTC campus course, and during the Phase II clinical rotation. Each student must agree to abide by safety regulations, instructions and procedures, in order to minimize danger to him-herself and others in the clinical laboratory.

If a student does not have a clear understanding of the safety regulations, instructions and procedures as presented, it is the student's responsibility to ask for clarification.

A recent physical examination is required before a student enters the Practicum.

It is highly recommended that the student have medical/hospitalization insurance in force during the Junior year and Phase I and II of the Practicum since health care expenses are solely the responsibility of the student.

A student will be required to report to the University Health Services Center and complete an incident form when an injury occurs during class hours. This will be done as a precautionary measure and will be strictly adhered to. The student is responsible for cost associated with all medical care.

- S. Granting of the baccalaureate degree and/or certificate is not contingent upon students passing any type of external certification or licensure examination.
- T. The dress code for Practicum students is based upon professional and safety

considerations. Beginning January 2006 a uniform will be required for Phase I and Phase II.

**Application for Practicum:**

You must make application for the Practicum (applications made in Fall semester for January Class and Spring semester for July Class). It is your responsibility to obtain an application from The Medical Technology Office (Room 307, Chain Technology Center) the first of the appropriate semester, complete, and return it by the Departmental deadline. A portion of the application will include review of a Practicum Student Policy Manual, which includes additional policies for the Practicum.

**Criteria For Admission To Practicum:**

1. Completed application which includes professional liability, hepatitis vaccination, physical report, etc.
2. Successful completion of all courses in the medical technology curriculum through the junior level. A grade of C or better must have been obtained in lecture and laboratory of each junior-level MTC course.
3. A cumulative and science grade point average (GPA) of at least 2.30. (A list of applicable science courses is available from Departmental Chair.
4. Demonstration of qualities and attitudes which are necessary to develop as a competent professional in the field of medical technology.

\*Note: Stipulations applying to MTC undergraduate courses in this document also apply to graduate students.

I understand the information in this document, I have received a copy of this document, and agree to abide by the stipulation set forth in this document. I have read and understand the program's essential functions (J.) and believe that I can meet them.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date