



Summer 2010

Medical **L**aboratory **T**ech

COASTAL CAROLINA COMMUNITY COLLEGE

Equal Education Opportunity and Equal Employment Opportunity Policy

No person shall on the basis of race, color, creed or religion, age, sex, national origin, or physical disability status, except where age or physical disabilities are found to be a bona fide occupational qualification, be excluded from employment or participation in, be denied the benefits of, or be subject to discrimination under any program or activity of this institution.

It is the policy of this institution not to discriminate on the basis of sex in the admission requirements, educational programs, activities, or employment policies as required by Title IX in the Educational Amendments of 1972.

In conformance with the provisions of the Rehabilitation Act of 1973, and other applicable laws and regulations, Coastal Carolina Community College will not discriminate against any student, employee, or applicant for admission or employment because of physical disabilities.

The main campus of Coastal Carolina Community College has been designed with the elimination of physical obstacles so that buildings, restrooms, laboratories, and classrooms are readily accessible to and usable by those with physical disabilities.

Any student or applicant for admission with a disability who wishes to request some accommodation must contact the Admissions Office and ask for the Coastal Carolina Community College Request for Accommodation form. If accommodation is not requested in advance in order to provide the College sufficient and adequate time to meet the student or applicant's needs, Coastal cannot guarantee the availability of a reasonable accommodation when it is needed.

Any student or prospective student who believes that discrimination has limited any educational opportunity, or any College employee who believes employment rights have been denied on the basis of discrimination, or any individual who desires information concerning this policy should contact the following designated responsible employee: Affirmative Action Officer and Title IX Coordinator, Henderson Administration Building, (910) 938-6788.

Fall 2010
MEDICAL LABORATORY TECHNOLOGY
A45420

CURRICULUM DESCRIPTION

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Coursework emphasizes mathematical and scientific concepts related to **specimen collection**, laboratory testing and procedures, quality assurance, and reporting/recording and interpreting findings involving tissues, blood, and body fluids. **It is recommended that all applicants have an eye exam and have the ability to type 25 words per minute.**

Graduates may be eligible to take examinations given by the Board of Registry of the American Society for Clinical Pathology or the National Credentialing Agency for Laboratory Personnel. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

Coastal Carolina Community College offers an Associate in Applied Science Degree. This has been identified as a limited enrollment program and may involve certain deadlines. See an academic counselor for additional information. The appropriate course work is listed below.

			Hours Per Week			
			Class	Lab	Clinic	Credit
FALL SEMESTER (1ST YEAR)						
BIO	140	Environmental Biology	3	0	0	3
CHM	130	General, Organic and Biochemistry	3	0	0	3
CHM	130A	General, Organic and Biochemistry Lab	0	2	0	1
CIS	111	Basic PC Literacy	1	2	0	2
MLT	110	Introduction to MLT	2	3	0	3
MLT	111	Urinalysis and Body Fluids	1	3	0	2
MLT	115	Laboratory Calculations	2	0	0	2
MLT	140	Introduction to Microbiology	2	3	0	3
			15	13	0	19
SPRING SEMESTER (1ST YEAR)						
BIO	163	Basic Anatomy and Physiology	4	2	0	5
ENG	111	Expository Writing	3	0	0	3
MLT	120	Hematology / Hemostasis I	3	3	0	4
MLT	125	Immunohematology I	4	3	0	5
MLT	240	Special Clinical Microbiology	2	3	0	3
			16	11	0	20
SUMMER SEMESTER (Full Session)						
ENG	114	Professional Research and Reporting	3	0	0	3
			3	0	0	3
SUMMER SEMESTER (1ST Session)						
MLT	130	Clinical Chemistry I	3	3	0	4
			3	3	0	4
SUMMER SEMESTER (2ND Session)						
PSY	118	Interpersonal Psychology	3	0	0	3
Humanities//Fine Arts Elective			3	0	0	3
			6	0	0	6
FALL SEMESTER (2ND YEAR)						
MLT	259	MLT Practicum I	0	0	33	11
MLT	280	Special Practice Lab	0	3	0	1
			0	3	33	12
SPRING SEMESTER (2ND YEAR)						
MLT	217	Professional Issues	0	3	0	1
MLT	269	MLT Practicum II	0	0	33	11
			0	3	33	12
TOTAL SEMESTER HOURS						76

ACADEMIC REGULATIONS

A student will be considered to be on probation during a semester if the student is not maintaining an overall average of "C." A student will be on probation with the Medical Laboratory Technology Program if a final grade of "D" is earned in one (1) MLT prefix course. A student will be suspended from the MLT Program if a final grade of "F" or more than one final grade of "D" is earned in an MLT prefix course. A student who receives an "F" in a non-MLT course may be permitted to continue in the program if he/she can successfully complete the required course by the end of the summer semester following his/her expected date of graduation.

The possible transfer of MLT prefix courses will be evaluated according to college written guidelines.

MLT JOB OPPORTUNITIES

Starting SALARY – usually \$17/hour or approximately \$37,000/year

The MLT associate in applied science degree provides a background for higher degrees in medical technology (4-year degree), medicine, veterinary medicine, chemistry, hematology, microbiology and immunohematology. The MLT degree offers professional advantages because of the availability of jobs in readily accessible settings such as local hospitals. Demand for highly trained clinicians is rising rapidly. The many opportunities listed below can accommodate a variety of personal preferences for scheduling of work hours, employment setting and areas of specialization.

American Red Cross	Hospital laboratories	Public health clinics
Armed forces	Industry	Reference laboratories
Biomedical products	Laboratory sales	Research
Civil service	Peace Corps	Veterinary laboratories
Doctors' offices	Pharmaceutical firms	and many, many more
Education	Private clinics	

NOTE

MLT students will learn to draw blood and process other body fluids and solids such as sputum, urine, feces, etc. to perform all necessary procedures in their program of study.

MLT ACCREDITATION AND CERTIFICATION

- CCCC's MLT Program is accredited through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
- After graduation, candidates will be eligible to take the national board examination through the American Society for Clinical Pathology (ASCP) as a Medical Laboratory Technician (MLT) or through the National Credentialing Agency for Laboratory Personnel (NCA) as a Clinical Laboratory Technician (CLT).

ADMISSION REQUIREMENTS CHECKLIST

In order to be a qualified applicant for the Medical Laboratory Technology Program for the fall 2010 semester, all candidates must go through the following four (4) step process.

- Step 1 Candidate completes Level I requirements
- Step 2 Candidate completes Level II requirements
- Step 3 Counselor initiates the selection process
- Step 4 Counselor sends letters to all Level II candidates

APPLICATION PERIOD EXTENDS FROM June 1, 2009, TO June 1, 2010, OR UNTIL THE PROGRAM IS FULL.

Step 1 – Level 1 Requirements

It is the applicant's responsibility to ensure that the following requirements are met or in progress before submitting a Level II application for the MLT Program.

- A. Submit a current application to the Coastal Carolina Community College admission office.
- B. Submit official transcript(s) to the admission office.
 - High school or GED
 - All colleges and schools attended after high school
 - CLEP (College Level Examination Program) scores
 - AP (Advanced Placement) scores
- C. Submit evidence of high school algebra I **and** algebra II, or equivalent (MAT 070), or higher level algebra course taken with a minimum grade of "C" (77% - 84%).
- D. Submit evidence of CHM 090 or
 - higher level **college** chemistry course with a minimum grade of "C" (77% - 84%) taken within the past five (5) years;
 - a CLEP score of 50 or higher in chemistry may be used within the five (5) year limit;
 - If a candidate has taken a high school chemistry course with a final grade of "C" or higher within the past five (5) years, he/she is eligible to take the Coastal Carolina Community College Science Department CHM 090 Competency Quiz. If a passing score is earned on the competency quiz, the candidate will have met the chemistry qualification requirement. A copy of the competency quiz results must be given to the MLT program academic counselor.
- E. Receive minimum placement scores on one (1) of the placement tests listed below. Tests must have been taken **ON OR AFTER** August 1, 2007, to be valid.

COMPASS		ASSET		SAT		ACT		ACCUPLACER/CPT	
Writing	77	Writing	42	Writing	520	Writing	21	English	90
Reading	84	Reading	42	Reading	520	Reading	22	Reading	84
Pre-Algebra	47	Numerical	41	Mathematics	540	Mathematics	23	Mathematics	55
Algebra	42	Intermediate Algebra	40					Algebra	55

All candidates must take one of the placement tests. In order to show evidence that a candidate's skill levels in writing, reading, and mathematics are at the necessary **current skill levels**, each candidate must have taken an acceptable placement test within three (3) years of the entry term of the program, even if she/he has taken previous college courses, is currently taking college courses, has been continuously enrolled in a college, or has completed a college degree.

- F. If required test scores are not attained (candidates may retest once a year), alternative classes may be taken. **All alternate courses should be completed by the end of the spring semester of the year in which the candidate wishes to enter the MLT Program on a space available basis. Late contingent candidates must complete alternate classes by the end of the summer semester of the year in which they wish to enter the MLT Program on a space available basis.**

Writing Scores

Less than 77 – COMPASS or 42 – ASSET
90 Accuplacer/ CPT

520 – SAT or 21 ACT

Reading Scores

Less than 84 – COMPASS or 42 – ASSET
84 Accuplacer/ CPT

520 – SAT or 22 – ACT

Writing Score Alternate Courses

ENG 080 and/or ENG 090 / or ENG 111
Earning a grade of "C" (77% - 84%) or higher

Take COMPASS Test

Reading Score Alternate Courses

RED 080 and/or RED 090 / or ENG 111
Earning a grade of "C" (77% - 84%) or higher

Take COMPASS Test

Math Scores

Less than 47 – COMPASS Pre-Algebra Skills
Less than 41 – ASSET Numerical
Less than 55 – Accuplacer/CPT

Less than 540 – SAT or 23 – ACT

Algebra Scores

Less than 42 – COMPASS Algebra
Less than 40 – ASSET Intermediate Algebra
Less than 55 – Accuplacer/CPT

Less than 540 – SAT Math or 23 ACT Math

Math Score Alternate Courses

MAT 050 and/or MAT 060
Earning a grade of "C" (77% - 84%) or higher

Take the COMPASS Test

Algebra Score Alternate Courses

MAT 070* - *grade of "C" (77% - 84%) or higher*
MAT 070* - *grade of "C" (77% - 84%) or higher*

**MAT 050 and/or MAT 060 may be required first.*

Take COMPASS Test

Applicants may complete the Level I requirements (A-F) in any order that is convenient for them as long as they meet the June 1, 2010, deadline.

NOTES

- Only test scores which have been earned within three (3) years of the entry term of the program will be considered. A candidate may retake the placement test once per year.
- It is strongly recommended that a candidate who does not receive the necessary minimum placement test scores in any area either review in the Academic Studies Center and Math Lab before retesting or take the appropriate remedial course(s) suggested based on the test results.
- Alternative classes must be taken following (**not before**) placement testing within the three (3) year time limit for that application period.

Step 2 – Level II Application Requirements

After completing an application to the college and taking a placement test (i.e. Compass) , candidates should schedule an appointment with Maryann Brown, the admission counselor for the MLT program, by calling (910) 938-6248 or (910) 938-6332.

During the Level II appointment:

1. Level I requirements will be verified.
2. Level II application will be completed.

NOTE

All candidates must be of good physical health and mental ability (including visual acuity and manual dexterity) in order to accomplish the tasks delineated in the MLT curriculum.

RELATED COLLEGE COURSES

Because of the academic demands of the Medical Laboratory Technology Program, it is to the advantage of the candidate to complete as much of the related coursework as possible before beginning the actual MLT Program. Candidates may take the following courses at Coastal Carolina Community College or receive credit for equivalent courses with a grade of "C" (77% - 84%) or higher at an accredited college. Anatomy and Physiology, and General, Organic and Biochemistry classes must be completed within five (5) years of the entry term of the program. Please check with the appropriate student services personnel (Financial Aid, Veteran's Affairs, etc) to determine how taking these related classes will affect your Pell, VA, etc.

Related Classes		<u>Course Substitutions</u>
BIO 163**	Basic Anatomy and Physiology	BIO 168 and 169
BIO 140	Environmental Biology	
CHM 130**	General, Organic and Biochemistry	
ENG 111	Expository Writing	
ENG 114	Professional Research and Writing	
CIS 111*	Basic PC Literacy	CIS 110
PSY 118*	Interpersonal Psychology	PSY 150
***	Humanities/Fine Arts	
*	Not a college transfer class. See course substitutions.	
**	5 year limit	
***	See list of options on page 5 of this bulletin.	

NOTE

It is **strongly** recommended that all candidates complete **ACA 111 – COLLEGE STUDENT SUCCESS** before entering the MLT Program even though this class is not part of the related classes.

APPROVED HUMANITIES/FINE ARTS ELECTIVES

(Choose one (1) class)

ART 111	Art Appreciation	HUM 130	Myth in Human Culture
ART 114	Art History Survey I	HUM 160	Introduction to Film
ART 115	Art History Survey II	HUM 211	Humanities I
DRA 111	Theatre Appreciation	HUM 212	Humanities II
DRA 112	Literature of the Theatre	MUS 110	Music Appreciation
DRA 211	Theatre History I	MUS 210	History of Rock Music
DRA 212	Theatre History II	MUS 213	Opera and Music Theatre
ENG 231	American Literature I	PHI 215	Philosophical Issues
ENG 232	American Literature II	REL 112	Western Religions
ENG 241	British Literature I	REL 211	Intro to Old Testament
ENG 242	British Literature II	REL 212	Intro to New Testament
ENG 261	World Literature I	REL 221	Religion in America
ENG 262	World Literature II		

Step 3 – Selection Process

- The **first twenty (20) qualified** candidates who complete the Level I and Level II requirements are **accepted** into the MLT Program.
- All other qualified candidates will be **alternates** for the MLT Program. An alternate candidate will be admitted only if one of the originally accepted candidates declines. Alternate candidates not offered admission by the first day of class must reapply for the MLT Program if they wish to be considered for a future class.
- A candidate who has not yet met **all Level II application requirements** will be a **contingent** candidate for the MLT Program. A contingent candidate will be admitted on a space available basis only if all Level II requirements are met before the MLT Program begins.

RE-ADMISSION POLICY

A student requesting re-admission to the Medical Laboratory Technology Program must complete the Level I and Level II requirements in the admission process. Any MLT course for which a grade of “F” was received must be repeated. Audit requirements for courses successfully completed will be determined individually by the MLT program director based on previous academic achievement and/or the time period between the completed courses and re-admission.

Step 4 – Letters Sent to Level II Candidates

One (1) of the following letters will be sent to all Level II candidates February 26, 2010.

- Acceptance Letter ----- first 20 qualified candidates
- Alternate Letter ----- all other qualified candidates
- Contingent Letter ----- all candidates who still have any Level I requirements in progress

NOTES

- Alternate and contingent candidates not admitted to the MLT Program must reactivate their admission packets and reapply if they wish to be considered for a future class.
- Individuals may apply/reapply to the MLT Program as candidates following the four (4) step admission process any year for which they are qualified according to the admission bulletin for the appropriate school year.
- Candidates accepted into the MLT Program, alternate candidates, and contingent candidates must submit an MLT Entrance Agreement form, an MLT Alternate Status Agreement form, or an MLT Contingent Status Agreement form by the specified deadline.
- Candidates accepted to the MLT Program must attend an orientation/registration meeting. Alternate and contingent candidates are also strongly encouraged to attend the orientation meeting.
- Medical forms will be mailed to all candidates on February 26, 2010. It is the candidate's responsibility to return the completed medical forms to the MLT department head on the first day of the fall semester. If a candidate has any questions about the medical forms, he or she may contact the MLT program director at 910-938-6306 or the division chair, nursing and allied health, at 910-938-6273.
- **Candidates are strongly advised to make photocopies of their medical forms for their own records.**
- Candidates who are admitted to the MLT Program need to be aware of the importance of regular class attendance in order to be successful in their classes. Candidates should coordinate doctor appointments and vacations with college holidays and breaks. **Also, it is vital to have child care arrangements worked out in advance in case of children's illnesses, teacher work days, etc. If excess absences are accumulated, then an MLT student will be dropped from the program in accordance with the attendance guidelines in the college catalog.**
- **Candidates are strongly advised to limit the number of hours they are employed in order to maximize their potential for academic success in the MLT Program.**

APPROXIMATE EXPENSE LIST

(Amounts listed are estimates and subject to change.)

1ST YEAR TUITION/FEEES:

Fall	\$ 687.00	(In-State/Full Time, Tuition + Student Fee)
Spring	687.00	(In-State/Full Time, Tuition + Student Fee)
Books:		
Fall	465.00	
Spring	400.00	
Disposable Lab Coats	45.00	
Face Shield and Safety Glasses	30.00	
Hepatitis B Antibody Titer	50.00	
American Society for Clinical Lab Science Student Dues	30.00	
Criminal Background Check	50.00	
Professional Liability Insurance	20.00	
Calculator	40.00	
Immunization Tracker	15.00	
Permanent Markers	20.00	
TOTAL	\$2,939.00	

2ND YEAR TUITION/FEEES:

Summer	\$ 554.00	(In-State/Full Time, Tuition + Student Fee)
Fall	519.00	(In-State/Full Time, Tuition + Student Fee)
Spring	519.00	(In-State/Full Time, Tuition + Student Fee)
Books:		
Summer	75.00	
Fall/Spring	0	
Disposable Lab Coats	11.00	
Certification Exam Fee	175.00	
Uniforms*	250.00	
White Leather Shoes*	70.00	
PPD*	15.00	
MLT Program Patches*	13.00	
Professional Liability Insurance*	20.00	
Drug Test*	40.00	
Name Tags*	9.00	
Program Pin	50.00	
Permanent Markers	10.00	
TOTAL	\$2,330.00	

* These items will be required prior to 2nd year fall enrollment.

In-state tuition rate is based on \$42.00 per credit hour.

Tuition rates are determined by the North Carolina General Assembly and are subject to change.

Methods of payment: check, cash, money order, financial aid, scholarship, VISA, MasterCard.

Also consider miscellaneous expenses such as child care, notebooks, pens, paper, etc., and gas expense if assigned to an out-of-county hospital for clinical practice.

Clinical practice consists of rotating through the laboratory departments of blood bank, coagulation, chemistry, hematology, microbiology, serology, and urinalysis at one of the following hospitals.

*Carteret General Hospital, Morehead City, NC
Craven Regional Medical Center, New Bern, NC
Duplin General Hospital, Kenansville, NC
Lenoir Memorial Hospital, Kinston, NC
New Hanover Regional Medical, Wilmington, NC
Onslow Memorial Hospital, Jacksonville, NC
Wayne Community Hospital, Goldsboro, NC*

Professional liability insurance must be procured prior to clinical practice.

FINANCIAL AID INFORMATION

Federal Aid Sources

- **FAFSA (Pell Grant, Work Study)**
 - Student Services Office
 - (910) 938-6332
 - assistance available
 - 2009 federal tax returns
 - 2009 W-2's
 - January 2010 to April 2010
 - Apply online by February 28, 2010, to qualify for NC Funds

State Aid Sources

- **Human Services (WIA)**
 - Continuing Education Building
 - (910) 938-6329
 - need FAFSA
 - child care
 - uniforms
 - January 2010 to April 2010

Local Aid Sources

- **CCCC Scholarships**
 - Administration Building
 - (910) 938-6792
 - need FAFSA
 - transcripts
 - 2 letters of reference
 - April 1, 2010, to June 1, 2010, Deadline

Go online to www.cfnc.org for more financial aid opportunities and information.

FINANCIAL AID WEB SITES

Information regarding scholarship sources is available at no cost, but you have to do your homework. You won't get any better information than you can get from the free services available on the web:

<p>www.FinAid.org Comprehensive Financial Page</p>	<p>www.SallieMae.com Private Alternative Loan</p>
<p>www.CFNC.org Financial Aid for North Carolinians</p>	<p>www.CollegeAnswer.com SallyMae College Answer</p>
<p>www.CareersAndColleges.com Scholarship Search</p>	<p>www.WellsFargo.com/student Private Alternative Loans</p>
<p>www.CollegeNET.com Scholarship Search</p>	<p>www.StudentAid.ed.gov US Department of Education Federal Student Aid</p>
<p>www.CollegeScholarships.com Scholarship Search</p>	<p>www.ed.gov/ThinkCollege US Department of Education Think College</p>
<p>www.FastWeb.com Scholarship Search</p>	<p>www.NAAS.org National Academy of American Scholars</p>
<p>www.Scholarships.com Scholarship Search</p>	<p>www.GoCollege.com Go College: The Collegiate Web Source</p>
<p>www.SuperCollege.com Scholarship Search</p>	<p>http://apps.collegeboard.com/cbsearch_ss/welcome.jsp The College Board</p>
<p>www.NationalMerit.org National Merit Scholarship</p>	<p>www.Scholarship-Page.com The Scholarship Page</p>

OTHER CAREER RESOURCES

www.BLS.gov/oco/home.htm
Bureau of Labor Statistics

www.ecu.edu/e3careers
ECU Student Professional Development

www.NCHealthCareers.com
NC Health Careers

For questions about admission to the MLT Program, please contact

**Maryann Brown
Academic Counselor
(910) 938-6248**

For program specific questions about MLT, please contact

**Susan R. Morton
Program Director
(910) 938-6306
or
Ms. Paula Gribble
Division Chairperson
(910) 938-6273**

For admission to the Medical Laboratory Technology Program, call or write

**Coastal Carolina Community College
444 Western Boulevard
Jacksonville, NC 28546
(910) 938-6249**

ACCREDITING AGENCY

**NATIONAL ACCREDITING AGENCY FOR
CLINICAL LABORATORY SERVICES
8410 WEST BRYN MAWR AVENUE
SUITE 670
CHICAGO, IL 60631-3415
(773) 714-8880**

Clinical sites and employers may require applicants to undergo drug testing and/or a criminal background check.

It is the responsibility of all accepted candidates who test positive for hepatitis or HIV to notify the following office:

**Chief
Communicable Disease Control Section
PO Box 27687
Raleigh, NC 27611-7687**