



**Medical Assisting
 Credential: Associate in Applied Science Degree
 in Medical Assisting
 A4540000**

The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures. Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, medical transcription, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of the Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.

Program Specific Entrance Standards

1. Complete all developmental courses. (All test scores must be less than five years old or the student must have earned a "C" or better in the corresponding developmental courses or have received transfer credit.
 - a) CPT reading score of 80 or ACT score of 18 or SAT verbal score of 450 or completion of developmental reading requirements.
 - b) CPT English score of 86 or ACT score of 18 or SAT verbal score of 450 or completion of developmental English requirements.
 - c) CPT arithmetic score of 55 or ACT score of 18 or SAT mathematics score of 450 or completion of developmental arithmetic requirements.
 - d) CPT algebra score of 55 or ACT score of 18 or SAT mathematics score of 450 or completion of developmental algebra requirements.
2. Attend a scheduled information session or interview with a medical assisting instructor.
3. A physical examination and immunization update are required. Once a student has been tentatively accepted, forms to be used by the physician will be provided by the College.
4. Students transferring into the program must have a 2.0 GPA or better.

Program Specific Academic Standards:

1. Students must achieve a grade of "C" or better in all major courses in the curriculum to progress.

Program Length: 5 semesters
 Career Pathway Options: Associate in Applied Science in Medical Assisting; Diploma in Medical Assisting

Program Sites:
 Chatham Campus - Day Program, 1st year
 Harnett Campus - Day Program, 1st year
 Lee Campus - Day Program, 2nd year

Course Requirements for Medical Assisting Degree

A. General Education Courses (15 SHC)		C-L-CI-SHC
ENG 110	Freshman Composition OR	3-0-0-3
ENG 111	Expository Writing	3-0-0-3
ENG 111A	Expository Writing Lab	0-2-0-1
ENG 116	Technical Writing OR	3-0-0-3
ENG 113	Literature Based Research OR	3-0-0-3
ENG 114	Professional Research and Reporting OR	3-0-0-3
ENG 115	Oral Communications	3-0-0-3
MAT 110	Mathematical Measurements Humanities Elective	2-2-0-3 3-0-0-3
PSY 110	Life Span Development	3-0-0-3

B. Required Major Core Courses (35 SHC)		
MED 110	Orientation Medical Assisting	1-0-0-1
MED 116	Introduction to Anatomy and Physiology	3-2-0-4
MED 118	Medical Law and Ethics	2-0-0-2
MED 121	Medical Terminology I	3-0-0-3
MED 122	Medical Terminology II	3-0-0-3
MED 130	Administration Office Procedures I	1-2-0-2
MED 131	Administration Office Procedures II	1-2-0-2
MED 134	Medical Transcription	2-2-0-3
MED 140	Exam Room Procedures I	3-4-0-5
MED 150	Laboratory Procedures I	3-4-0-5
MED 260	Clinical Externship	0-0-15-5

C. Other Major Hours Required for Graduation (26 SHC)		
CIS 111	Basic PC Literacy	1-2-0-2
MED 138	Infection/Hazard Control	2-0-0-2
MED 230	Administrative Office Procedures III	1-2-0-2
MED 232	Medical Insurance Coding	1-3-0-2
MED 240	Exam Room Procedures II	3-4-0-5
MED 264	Medical Assisting Overview	2-0-0-2
MED 270	Symptomatology	2-2-0-3
MED 272	Drug Therapy	3-0-0-3
MED 274	Diet Therapy/Nutrition	3-0-0-3
MED 276	Patient Education	1-2-0-2

Total Semester Hours Credit Required for Graduation: 76

Semester Curriculum for Medical Assisting Degree

1st Semester (Fall)		C-L-CI-SHC
CIS 111	Basic PC Literacy	1-2-0-2
MAT 110	Mathematical Measurements	2-2-0-3
MED 110	Orientation to Medical Assisting	1-0-0-1
MED 116	Introduction to Anatomy and Physiology	3-2-0-4
MED 118	Medical Law and Ethics	2-0-0-2
MED 121	Medical Terminology I	3-0-0-3
MED 130	Administrative Office Procedures I	1-2-0-2
MED 138	Infection/Hazard Control	<u>2-0-0-2</u>
		15-8-0-19

2nd Semester (Spring)		
ENG	English Requirement	3-0-0-3
MED 122	Medical Terminology II	3-0-0-3
MED 140	Exam Room Procedures I	3-4-0-5
MED 150	Laboratory Procedures I	3-4-0-5
PSY 110	Life Span Development	3-0-0-3
		15-8-0-19

3rd Semester (Summer)		
MED 240	Exam Room Procedures II	3-4-0-5
MED 260	Clinical Externship	0-0-15-5
		3-4-15-10

Students may elect to exit with a diploma.

4th Semester (Fall)		
ENG	English Requirement	3-0-0-3
MED 131	Administrative Office Procedures II	1-2-0-2
MED 134	Medical Transcription	2-2-0-3
MED 270	Symptomatology	2-2-0-3
MED 272	Drug Therapy	3-0-0-3
		11-6-0-14

5th Semester (Spring)		
HUM	Humanities Elective	3-0-0-3
MED 230	Administrative Office Procedures III	1-2-0-2
MED 232	Medical Insurance Coding	1-3-0-2
MED 264	Medical Assisting Overview	2-0-0-2
MED 274	Diet Therapy/Nutrition	3-0-0-3
MED 276	Patient Education	1-2-0-2
		11-7-0-14

Total Semester Hours Credit: 76

COURSE DESCRIPTIONS

CIS 111 Basic PC Literacy 1-2-2
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

ENG 110 Freshman Composition 3-0-3
Prerequisites: RED 080 and ENG 090 or appropriate placement test scores
This course is the first course in a series of two designed to develop informative and business writing skills. Emphasis is placed on logical organization of writing, including effective introductions and conclusions, precise use of grammar, and appropriate selection and use of sources. Upon completion, students should be able to produce clear, concise, well-organized short papers.

ENG 111 Expository Writing 3-0-3
Prerequisites: RED 090 and ENG 090 or appropriate placement test scores
Corequisites: ENG 111A
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 111A Expository Writing Lab 0-2-1
Prerequisites: RED 090 and ENG 090 or appropriate placement test scores

Corequisites: ENG 111
This writing laboratory is designed to apply the skills introduced in ENG 111. Emphasis is placed on the editing and revision components of the writing process. Upon completion, students should be able to apply those skills in the production of final drafts in ENG 111. The computer is used as a writing and design tool for this course.

ENG 113 Literature-Based Research 3-0-3
Prerequisites: ENG 111

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. Students should be able to respond to literature orally in class discussions and in small group and individual presentations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 114 Prof. Research and Reporting 3-0-3
Prerequisites: ENG 111

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. The computer is used as a writing and design tool for this course. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 115 Oral Communication 3-0-3
This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

ENG 116 Technical Report Writing 3-0-3
Prerequisites: ENG 110 or ENG 111

This course, the second in a series of two, introduces layout and design of technical reports used in business and industry. Emphasis is placed on audience analysis, data collection and analysis, technical writing style and organization, oral presentation or technical data, and the appropriate use of graphics in written and oral presentations. Upon completion, students should be able to produce written and oral reports using a variety of technical communication models.

MAT 110 Mathematical Measurement 2-2-3
Prerequisites: MAT 070, MAT 080, MAT 120, MAT 121, MAT 161, MAT 171, or MAT 175 or appropriate placement test scores
This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and

charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

MED 110 Orientation to Med Assist 1-0-1
This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

MED 116 Introduction to A and P 3-2-4
This course introduces basic anatomy and physiology. Emphasis is placed on the relationship between body structure and function and the procedures common to health care. Upon completion, students should be able to identify body system components and functions relating this knowledge to the delivery of health care.

MED 118 Medical Law and Ethics 2-0-2
This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

MED 121 Medical Terminology I 3-0-3
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122 Medical Terminology II 3-0-3
Prerequisites: MED 121
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 130 Admin Office Proc I 1-2-2
Prerequisites: Enrollment in the Medical Assisting program or permission of instructor, MAT 060
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED 131 Admin Office Proc II 1-2-2
Prerequisites: MED 130
This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

MED 134 Medical Transcription 2-2-3
Prerequisites: MED 121, MED 122, CIS 111
This course provides the basic knowledge, understanding, and skills required to complete medical reports and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competence in medical transcription.

MED 138 Infection/Hazard Control 2-0-0-2
This course introduces the student to infection and hazard control procedures necessary for the healthcare worker. Topics include introduction to Microbiology, Practical Infection Control, Sterilization and Monitoring, Chemical Disinfectants, Aseptic Technique, Infectious Diseases, OSHA Standards, and Applicable North Carolina Laws. Upon completion, students should be able to: understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA Standards, and applicable North Carolina laws.

MED 140 Exam Room Procedures I 3-4-5
Prerequisites: Enrollment in the Medical Assisting program CIS 111, MAT 110, MED 110, MED 116, MED 118, MED 121, MED 130, MED 138
This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED 150 Laboratory Procedures I 3-4-5
Prerequisites: Enrollment in the Medical Assisting program CIS 111, MAT 110, MED 110, MED 116, MED 118, MED 121, MED 130, MED 138
This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

MED 230 Admin Office Proc III 1-2-0-2
Prerequisites: MED 131, MED 134, MED 260 or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111
This course provides advanced medical office administrative procedures. Emphasis is placed on management skills including personnel supervision, practice management, public relations, and insurance coding. Upon completion, students should be able to exhibit advanced managerial medical assisting skills.

MED 232 Medical Insurance Coding 1-3-2
Prerequisite: MED 122, Med 131
This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

MED 240 Exam Room Procedures II 3-4-0-5
Prerequisites: MED 140
This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion students should be able to demonstrate enhanced competence in selected exam room procedures.

MED 260 MED Clinical Externship 0-15-5

Prerequisites: Enrollment in the Medical Assisting Program; Adult, Infant, and Child CPR Certification for Healthcare Providers; CIS 111, MAT 110, MED 110, MED 116, MED 118, MED 122, MED 130, MED 138, ENG 110 or ENG 111/111A, MED 140, MED 150, PSY 110

Corequisites: MED 240

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional. The student will not receive any monetary compensation for this externship.

MED 264 Med Assisting Overview 2-0-2

Prerequisite: MED 134, MED 260 or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111

This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be able to demonstrate competence in the areas covered on the national certification examination for medical assistants.

MED 270 Symptomatology 2-2-3

Prerequisite: MED 260 or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111, or special permission of instructor

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

MED 272 Drug Therapy 3-0-3

Prerequisite: MED 260 or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111, or special permission of instructor

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

MED 274 Diet Therapy/Nutrition 3-0-3

Prerequisite: MED 134, MED 260, or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111, or special permission of instructor

This course introduces the basic principles of nutrition as they relate to health and disease. Topics include basic nutrients, physiology, dietary deficiencies, weight management, and therapeutic nutrition in wellness and disease. Upon completion, students should be able to interpret clinical and dietary data and provide patient counseling and education.

MED 276 Patient Education 1-2-2

Prerequisite: MED 134, MED 260, or CMA certification, BIO 163, ENG 111, PSY 110 and CIS 111, or special permission of instructor

This course is designed to provide communication skills, basic education principles, and knowledge of available community resources and to apply this knowledge to the clinical setting. Emphasis is placed on identifying appropriate community resources, developing patient education materials, and perfecting written and oral communication skills. Upon completion, students should be able to instruct, communicate effectively, and act as a liaison between the patient and community agencies.

PSY 110 Life Span Development 3-0-3

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death.

Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.