Fayetteville Technical Community College

2008-2009 List of Student Learning Outcomes/Objectives

As of: 5/8/2009, 9:00 AM

AC, Heating & Refrigeration Technology

1. Students will use information to analyze problems and make logical decisions in the diagnosing of the proper refrigerant charge using Manifold gauges.
2. Students will show competency in knowledge of EPA regulations.
3. Students will demonstrate the proper use of an electrical multi-meter by measuring volts, amps, and ohms.

Accounting

1. Students will use information to analyze problems and make logical decisions about the preparation of financial statements.
2. Students will develop the ability to interpret financial reports.
3. Students will successfully format spreadsheets.

Advertising and Graphic Design

1. Students will demonstrate increased awareness of the role of their program advisor in conjunction with their education plan.
2. Students will learn to analyze problems and make logical decisions in order to develop appropriate ads and collateral materials that are able to create a response in the target market.
3. Students will learn to use the design software used by professionals in this career field.

Architectural Technology

1. Students will be able to use information to analyze problems and make logical decisions in the preparation of residential working drawings.
2. Students will demonstrate a working knowledge of CADD programs.
3. Students will demonstrate an understanding of residential building codes.

Associate Degree Nursing

1. Students will use information to analyze problems and make logical decisions while developing a comprehensive nursing care/treatment plan.
2. Students will demonstrate their competency in the technical skills required in the profession as a registered nurse.
3. Students will demonstrate quantitative competencies by correctly performing dosage calculations required to properly prepare and administer medication ordered by a provider

Auto Body Repair

1. Students will use information to analyze and make logical decisions while diagnosing damage using computer and manual measuring systems and make repair decisions.
2. Students will identify and repair minor vehicle damage including removal/repairing/replacing of body panels.
3. Students will demonstrate the ability to use proper equipment and materials in refinishing following accepted industry standards, surface preparation, masking and application techniques.

Automotive Systems Technology

1. Students will use information to analyze problems and make logical decisions while diagnosing vehicle customer complaints and malfunctions during brake repairs using repair manuals, Shop Key and/or Alldata.
2. Students will demonstrate ability to use precision measuring equipment required to determine machining requirements during engine rebuild.

BA - Banking and Finance

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will be able to calculate, analyze and interpret financial ratios to determine the credit worthiness of an individual or company

BA - Electronic Commerce

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will design and create a fully operational E-commerce web site.

BA - Human Resources Management

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will demonstrate effective writing skills for training and development materials within the human resources management field.

BA - Marketing and Retailing

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will demonstrate the ability to manage customer relations and handle stressful situations both efficiently and effectively.

BA - Operations Management

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will demonstrate an ability to establish, use and maintain inventory control data.

BA - Public Administration

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will demonstrate the ability to prepare short and long range public sector plans and documentation.

Basic Law Enforcement Training

1. Students will use information to analyze problems and make logical decisions to perform an arrest.
2. Students will be able to pass a firearms course.
3. Students will be able to pass a Sheriff's Responsibilities course.

Basic Skills Programs

1. Students will use information to analyze problems and make logical decisions to develop purposeful, focused learning strategies.
2. Adult Basic Education Level II students will increase their ability to interpret written information in context.
3. Intermediate and Advanced English as a Second Language students will demonstrate greater confidence in reading English.

Biotechnology

1. Students will use information to analyze problems and make logical decisions to isolate chromosomal DNA from Bacillus licheniformis.
2. Students will be able to perform calculations required to prepare buffer solutions.
3. Students will demonstrate their ability to use micropipettes with accuracy.

Building Construction Technology

1. Students will be able to use information to analyze problems and make logical decisions in the area of framing a residential structure.
2. Students will be able to interpret and identify residential construction building components.
3. Students will interpret NC Residential Building Codes with accuracy and proficiency.

Business Administration

1. Students will use information to analyze problems or situations and make logical decisions in business management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will project a positive appearance that is required for the business field.

Carpentry

1. Students will be able to use information to analyze problems and make logical decisions pertaining to Residential Construction Plans/Prints.
2. Students will be able to properly identify various construction tools and the proper functions of each.
3. Students will be able to operate tools with safety and accuracy.

Central Sterile Processing

1. Students will use information to analyze problems and make logical decisions concerning the sterilization process.
2. Students will understand the principles and importance of record keeping requirements.
3. Students will understand the importance of Sterile Storage.

Civil Engineering Technology

1. Students will use information to analyze problems and make logical decisions to prepare technical reports.
2. Students will develop computational skills to support engineering applications.
3. Students will demonstrate proficiency while using AutoCAD programs.

Communication-English

1. Use information to analyze problems and make logical decisions to use documentation in an oral presentation.
2. Develop and use Audio/Visual materials in an oral presentation.
3. Develop and use a working outline for an oral presentation.

Community Services Extension Education

1. Students will use information to analyze problems and make logical decisions that will increase their understanding of and appreciation for the major achievements in the history of art.
2. Students will demonstrate the ability to utilize appropriate techniques and processes to create original works of art.
3. Students will develop and demonstrate verbally and in writing their ability to make valid assessments of both their own and other's artwork.

Community Spanish Interpreter

1. The student will know the English meaning of Spanish verbs and demonstrate correct conjugation in the present indicative tense.
2. The student will generate appropriate vocabulary in communication pertaining to personal information, student life, family relationships and pastimes.
3. The student will demonstrate comprehension of oral messages delivered by native speakers.

Computer Information Technology

1. Students will use information to analyze and make logical decisions in the development of a Local Area/Wide Area Network solution.
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will understand and apply the critical path in Project Management.

Computer Programming

1. Students will use information to analyze and make logical decisions in the development of a computer programming system solution using the Systems Development Life Cycle.
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will understand and apply the critical path in Project Management.

Criminal Justice Technology

1. Use information to analyze problems and make logical decisions related to investigative report writing.
2. Students will be able to identify the elements of crime.

3. Students will demonstrate knowledge of key principals of search and seizure (4th Amendment)

Culinary Technology

1. Students will be able to use information to analyze problems and make logical decisions in the development of recipes.
2. Students will become Servesafe Certified upon completion of CUL 110.

3. Students will be able to correctly perform calculations required for the conversions of recipe quantities.

Curriculum Programs- Gen Ed Competencies

1. Graduates of FTCC will communicate effectively in speaking, writing, reading and listening.
2. Graduates of FTCC will use critical thinking to analyze problems and make logical decisions.

3. Graduates will demonstrate socialization skills that support cultural awareness and a global perspective.
4. Graduates will demonstrate quantitative competencies.
5. Graduates will demonstrate computer literacy.

Dental Assisting

1. Students will use information to analyze problems and make logical decisions during operatory set up for patient appointments.
2. Students will perform technical skills required in the profession of dental assisting to accurately fabricate a temporary crown.
3. Students will communicate effectively in speaking, writing, reading, and listening during their clinical experiences in the community.

Dental Hygiene

1. Students will use information to analyze problems and make logical decisions while developing a comprehensive dental hygiene treatment plan.
2. Perform technical skills required in the profession of dental hygiene while performing routine and advanced dental hygiene procedures.
3. Using evidence-based research, students will communicate effectively in speaking, writing, reading, and listening in the written and oral presentation of a selected topic.

Developmental Math

1. The student will be able to use information to analyze problems and make logical decisions in fitting an appropriate mathematical model to a given situation.
2. The student will be able to use percents to solve applications involving sales tax, discounts, and simple interest.
3. The student will be able to use factoring to solve polynomial equations.

Developmental Science

1. Chemistry 81 students will be able to use information to analyze problems and make logical decisions as it relates to dimensional analysis.
2. Chemistry 81 students will be able to write chemical formulas and name inorganic compounds.
3. Chemistry 82 students will be able to classify and name representative organic compounds.

Developmental Studies-English

1. Students will use information to analyze problems and make logical decisions in formulating a topic sentence.
2. Students will have the ability to identify sentence fragments.

3. Students will construct a paragraph using MLA format.

Developmental Studies-Reading

1. Students will use information to make logical decisions in determining fact from opinion.
2. Students will evaluate context cues to deduce unknown word meanings.
3. Students will demonstrate the ability to identify main ideas in a paragraph.

Early Childhood Associate

1. Students will use information to analyze problems and make logical decisions to identify developmentally appropriate activities.
2. Students will be able to design thematic units that include four to six weeks of daily lesson plans using developmentally appropriate activities.
3. Students will demonstrate knowledge of the parts of the lesson plan.

Early Childhood Associate/Special Education

1. Students will use information to analyze problems and make logical decisions to develop case studies and an action (individualized education plan) plan.
2. Students will be able to identify assistive - technology devices.
3. Students will exhibit knowledge of North Carolina Compliance Standards.

Early Childhood Associate/Teacher Associate

1. Students will be able to use information to analyze problems and make logical decisions to develop a teaching portfolio for field experience (Co-op).
2. Students will be able to develop a resource book of student made activities.
3. Students will demonstrate mastery in the development of documentation of authentic evidence.

Early Childhood Education Center

2. The ECEC will provide students with experiences in a real- world scenario in their chosen career field.

Electrical/Electronics Technology

1. Students will be able to use information to analyze problems and make logical decisions in the basic construction of electrical circuits as outlined in the syllabus.
2. Students will understand the shock hazards of working with electrical circuits and equipment and the procedures for preventing of injury.
3. Students will perform basic installations of residential electrical equipment and materials.

Electronics Engineering Technology

1. Students will use information to analyze problems and make logical decisions involving the operation and design of a single-stage linear circuit.
2. Students will apply their knowledge of microcontroller programming and interfacing to create an embedded system.
3. Students will apply their knowledge of control systems to create a closed-loop control system.

Emergency Medical Science

1. Students will be able to use information and analyze problems to integrate pathophysiological principles and assessment findings to formulate a field impression and treatment plan
2. Students will be able to correctly perform calculations required to properly administer medication to a patient.
3. Students must be able to communicate effectively in speaking, writing, and listening during the evaluation and treatment of patients and interaction with other health care professionals.

Emergency Preparedness Technology

1. Students will use information to analyze problems and to make logical decisions related to the training of first responders
2. Students will be able to identify the chain of command of an Emergency Operations Center.
3. Students will demonstrate knowledge of a natural disaster's primary characteristic

English- Curriculum

1. Students will use information to analyze problems and make logical decision in the selection and documentation of appropriate research materials in preparation and support of a five paragraph composition
2. Students will apply the rules for the use of standard, academic structure and mechanics to a written five-paragraph composition.
3. Student will create a five paragraph composition that contains: an introduction (with a thesis statement), a body (three separate paragraphs with topic sentences and support) and a conclusion.

Facility Services

1. Use information to analyze problems and make logical decisions to provide the campus community with properly maintained facilities and adequate support service.

Fine Arts

1. Students will use information to analyze problems and make logical decisions to create visually articulate compositions, which employ the two-dimensional foundation techniques of: implied space and form, color theory, and value relationships.
2. Students will be able to demonstrate an understanding of the basic techniques, described as a foundation, used to create actual space, form and depth in three dimensional art.

3. Students will build and be able to utilize a portfolio of artworks, which will enable them to present, in a professional manner their creations to appropriate venues for display/exhibition. They will also be able to use this portfolio to further their careers, including the pursuit of higher education. This includes verbal articulation through a written Artsist's Statement as well as the visual articulation of the images.

Fire Protection Technology

1. Students will use information to analyze problems and to make logical decisions related to fire investigative report writing.
2. Students will be able to identify the elements of arson.

3. Students will demonstrate knowledge of the key characteristics of a structural fire.

Foundation & Alumni

1. Use information to analyze problems and make logical decisions to expand participation and giving to the Campus Fund Drive
2. Maintain a database for easy access to Alumni records to increase membership
3. Devise a fundraising plan to increase net assets for the Dinner/Theatre and Golf Tournament

Funeral Service Education

1. Students will be able to use information to analyze problems and make logical decisions in funeral directing to properly position and seat pallbearers, clergy, family members, and funeral attendees.
2. Students will be able to correctly operate pressurized embalming machines to prepare the machine for arterial injection.
3. Students will be able to differentiate between the various types, opening styles, parts, and closure and locking methods of caskets.

Healthcare Management Technology

1. Students will use information to analyze problems or situations and make logical decisions in health care management situations.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will project a positive appearance that is required for the health care field.

Horticulture Technology/Management

1. Students will be able to analyze information and make logical decisions in the recognition of common pests and diseases found on common landscape plants.
2. Students will be able to correctly identify 100 ornamental plants that are typically used in residential landscapes.

3. Students will be able to identify and offer treatments for common insect and disease problems of ornamental plants found in residential landscapes.

Hotel and Restaurant Management

1. Students will demonstrate the ability to think strategically in order to use information to analyze problems and make logical decisions regarding a given situation in the hospitality industry.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will demonstrate the ability to take a hospitality business from concept to operation.

Huskins Nursing Assistant

1. Use information to analyze problems and make logical decisions in the health care setting while providing personal care to adult patients.
2. Students will be able to obtain vital signs and report changes in a patient's condition.
3. Students will successfully progress from NA I into the NA II by passing the Pearson Vue Competency test.

Industry Training- Forklifting

1. Students will be able to explain basic forklift design and the factors that affect forklift stability, balance and maneuverability.
2. Students will demonstrate the technical skills for successfully operating the power forklift equipment of their employer.
3. Students will meet the industry standards for safe and successful forklift operation of any powered forklift equipment utilized by their employer.

Information Systems Security

1. Students will use information to analyze and make logical decisions in the development of a Local Area/Wide Area Network solution.
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will understand and apply the critical path in Project Management.

Library

1. Students will be able to use information to analyze problems and make logical decisions while accessing information in a variety of formats through library resources.
2. Students not receiving instructor-scheduled library orientation during a class period will be given the opportunity to attend on their own.
3. Distance education students will be able to navigate the library's online databases and resources.

Machining Technology

1. Students will be able to use information to analyze problems and make logical decisions in the correct interpretation of a machinist's blueprint.

2. Students will be able to correctly perform calculations required to properly operate mills and lathes.
3. Students will be able to produce parts, tools and fixtures from a provided blueprint to the tolerances specified in the print.

Math-Curriculum

1. The student will use information to analyze problems and make logical decisions to construct an appropriate mathematical model for a given circumstance or set of data.
2. The student will be able to draw qualitative conclusions about a given situation based on the quantitative results obtained from analyzing and interpreting data presented in a table, chart or graph.
3. The student will be able to evaluate formulas from a variety of disciplines, using calculators when appropriate.

Media Services

1. Media Services will use information to analyze problems and make logical decisions to increase the number of students enrolled in telecourses.
3. Media Services will use the, "Classroom Instructional Technology Construction Guidelines" developed in cooperation with North Carolina State University to evaluate the media technology in each classroom and make changes and upgrades to classrooms as necessary.

Medical Office Administration

1. Students will use information to analyze problems and make logical decisions in the proper completion of the entire insurance billing cycle.
2. Students will be satisfied with their progression in their program of study by developing an individual plan of study with the proper sequencing of courses.
3. Students will perform a non-clinical externship demonstrating the ability to perform successfully and professionally in a medical office environment.

Networking Technology

1. Students will use information to analyze and make logical decisions in the development of a Local Area/Wide Area Network solution.
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will understand and apply the critical path in Project Management.

Nuclear Medicine Technology

1. Students will be able to use information to analyze problems and make logical decisions in the performance of Nuclear Medicine myocardial perfusion clinical procedure.
2. Students will be able to dispense and administer radiopharmaceuticals related to hepatobiliary imaging procedures
3. Students will be able to competently apply skills they have learned in a clinical setting

Occupational Extension-Cabling Access Television Course

1. Students will use information to analyze problems and make logical decisions in interpreting cable system (plans) blueprints and establishing the prescribed systems.
2. Students will be able to establish and maintain components of both metallic wire and fiber optic systems by acquiring the needed climbing skills to work with aerial plans and the skills to work with sub-terrestrial systems.
3. Students will demonstrate the ability to take an installation order learned in the classroom and apply that knowledge to real-world situation.

Occupational Extension-Emergency Medical Technician-Paramedic

1. Students will be able to use information to analyze problems and make logical decisions while assessing and treating a given emergency situation.
2. Students will be able to demonstrate knowledge of the EMT-P Office of Emergency Medical Service guidelines.
3. Students will demonstrate preparation for the workplace environment during clinical rotations.

Occupational Extension-Registered Medical Assistant

1. Students will be able to use knowledge to analyze medical situations, and patient needs in order to provide sterile medical care.
2. Students will be able to correctly perform sterile medical procedures as outlined in the American Medical Technologist inventory, which is considered to be representative of the medical assisting role.
3. Student performance in the externship will demonstrate the ability to apply classroom and lab information to real-work situations.

Office of Dean of College Transfer & Gen Ed Programs

1. Graduates of FTCC's diploma and degree programs will communicate effectively in speaking, writing, reading, and listening.
2. Graduates of FTCC's diploma and degree programs will use critical thinking to analyze problems and make logical decisions.
3. Graduates of FTCC's diploma and degree programs will demonstrate socialization skills that support cultural awareness and a global perspective.
4.

5. Graduates of FTCC's diploma and degree programs will demonstrate computer literacy.

Office Systems Technology

1. Students will use information to analyze problems and make logical decisions in the production of error-free correspondence.

2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will demonstrate their ability to compose a résumé and cover letter that meets business/industry standards.

Paralegal Technology

1. Use information to analyze problems and make logical decisions in doing legal research by locating applicable North Carolina statutory law.
2. Demonstrate an understanding of the process of civil litigation to prepare a complaint for a civil action.
3. Demonstrate knowledge of the principles of title searching of real property to run a chain of title for 60 years.

Pharmacy Technology

1. Students will be able to use information to analyze problems and make logical decisions in the aseptic preparation of parenteral solutions.
2. Students will be able to correctly perform calculations required to properly prepare medication orders.
3. Clinical site preceptors will be satisfied with the student's educational preparation for the workplace environment.

Phlebotomy

1. Students will be able to analyze problems and make logical decisions when performing venipuncture.
2. Students will be able to analyze problems and make logical decisions when performing micro-collection.
3. Students will be able to competently apply the skills they learned in a clinical setting.

Physical Therapist Assistant

1. Given patient-specific scenarios, students will use information to analyze problems and make logical decisions in applying appropriate physical therapy interventions.
2. Students will demonstrate knowledge of identification of upper extremity muscles.
3. Students will be able to competently apply the skills they learned in each clinical rotation.

Plumbing

1. Students will be able to use information to analyze problems and make logical decision in the basic connections of drain and water line plumbing systems.
2. Students will understand leak potentials from plumbing, lines and the preventive procedures, applied for corrective action.
3. Students will safely assemble basic installation of plumbing pipes and fittings in residential and small buildings.

Postal Service Technology

1. Students will use information to analyze problems and make logical decisions in the preparations of postal office budgets. (POS 130)
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan. (POS 110)
3. Students will properly demonstrate an understanding of the duties of customer services representatives. (POS 135)

Practical Nursing

1. Students will be able to use information and analyze problems to make logical decisions concerning infection control.
2. Students will be able to correctly perform calculations required to properly administer medication to a patient.
3. Students must be able to communicate effectively during the treatment of patients and interaction with other health care professionals.

Public Relations & Marketing

1. Use information to analyze problems and make logical decisions regarding the effectiveness of newsletter products in place for the purpose of informing others about FTCC events and happenings.
2. Increase Internet-based marketing opportunities to expand public awareness of FTCC and effectively make use of technology available and currently being widely used by the general public.
3. Work with appropriate others to update the FTCC Web site to make the site more user friendly, more inviting, and structured for ease of navigation so that students and other onlookers are better served and can easily locate needed and timely information.

Radiography

1. Students will use information to analyze problems and make logical decisions in the use of ionizing radiation in the production of radiographs (x-rays).
2. Students will be able to practice technology based on theory and instruction and will demonstrate proficiency in trauma situations.
3. Students will provide effective patient safeguards related to radiation protection.

Respiratory Care

1. Students will be able to use information to analyze problems and make logical decisions when managing ventilators.
2. Students will demonstrate safe procedures during clinical rotations.

3. Students will demonstrate readiness to take credentialing exams post graduation.

Science-Curriculum

1. Students will use information to analyze problems and make logical decisions when identifying the characteristics of the three types of muscle tissue and their functions in the human body.
2. Students will be able to correctly identify the major bones and bone markings in the human body.
3. Students will be able to demonstrate correct usage of anatomical terms when applied to the human body.

Social Science/Humanities Area

1. Use information to analyze problems and make logical decisions on the social aspects of human motives (e.g., behaviors, beliefs, and cultures).
2. Recognize the impact of globalization on the social aspects of human motives.
3. Demonstrate knowledge of the role and impact of diversity on the social aspects of human motives.

Speech Language Pathology Assistant

1. Students will use information to analyze problems and make logical decisions concerning the SPLA therapeutic protocol.
2. Students will understand the principles and importance of data collection during therapy.
3. Students must be able to communicate effectively in speaking, writing, and listening during the evaluation and treatment of patients and interaction with other health care professionals.

Student Financial Aid & Services

1. The Financial Aid staff will use information gathered from staff development resources to analyze problems and make logical decisions to award financial aid to students per federal, state, and institutional regulations.
2. The Financial Aid staff will monitor customer service by creating and administering a customer service survey that will provide specific infomation about areas that need improvement.
3. Students will be satisfied with the information shared during community events and workshops to enable them to complete their FAFSA in a timely manner.

Success Center

2. Staff will increase awareness of the importance of direct instructor referrals to the Success Center.
3. Staff will implement a new Student Enrollment/Tracking/Reporting System within the Success Center.

Surgical Technology

1. Students will be able to utilize clinical/laboratory/classroom information to analyze problems and make logical decisions concerning aseptic technique to develop a surgical conscience.
2. Students will be able to perform a basic surgical set-up.

3. Students can competently apply the skills they have learned in a clinical setting

Surveying Technology

1. Students will use information to analyze problems and make logical decisions to prepare geomatic reports.
2. Students will develop computational skills to support engineering applications.
3. Students will demonstrate proficiency in using AutoCAD programs to display surveying results.

Web Technologies

1. Students will use information to analyze and make logical decisions in the development of web sites.
2. Students will demonstrate increased awareness of the role of the program advisor in their education plan.
3. Students will use critical thinking to create a project plan for deployment of a website.

Welding

1. Students will be able to use information to analyze and make logical decisions in the area of welding and cutting processes.
2. Students will be able to read and work with a variety of blueprints to complete welding jobs.
3. Students will be able to understand basic metallurgy, materials designation, and classification systems used in welding.