

# 2008 - 2009 BRTC Catalog Addendum

Revised 3-3-09

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## Calendar 2008-2009

### Spring Semester 2009

Only online orientation will be held for summer semesters.

Online Orientation and Registration for Intersession, Summer I, Summer II for first-time and transfer students will begin April 27 (M).

### Intersession 2009

Registration.....	through May 14 (R)
Late Registration.....	May 18 (M)
Classes Begin.....	May 18 (M)
Last Day to Drop a Class.....	May 25 (M)
Final Exams.....	May 28 (R)

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## Technical Certificates

- Accounting Assistant
- Administrative Services
- Auto Collision Repair Technology
- Automotive Service Technology
- Aviation Maintenance Technology
- Crime Scene Investigation
- Dietary Manager
- Emergency Medical Technician-Paramedic
- Fire Science
- Health Professions
- Industrial Electricity/Electronics
- Law Enforcement Administration
- Machine Shop
- Medical Laboratory Assistant
- Microcomputer Business Applications
- Practical Nursing
- Welding

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### Cancellation of Courses/or Programs of Study

Black River Technical College reserves the right to cancel courses and/or programs of study which do not meet its established criteria relating to:

1. Availability of competent instructors
2. Adequate facilities
3. Sufficient enrollment

## Admission Procedures

## Change to proof of immunization:

- Provide proof of immunization against measles and rubella for students with 30 or more earned credit hours born before January 1, 1957. Proof of immunization against measles and rubella and an MMR booster, with at least a 30 day interval between vaccines, is required for those students born on or after January 1, 1957 and freshman students (0-29 earned credit hours), regardless of age. Health regulations require that immunization be completed and documentation must indicate the month and year of immunization. This is mandatory for all students enrolled at BRTC. *EXCEPTION:* Immunization is not mandatory for a student taking courses for enrichment, unless the student is enrolled full-time or has completed 17 credit hours.

## Freshman Assessment and Placement

## COMPASS Algebra Test

## Score

50-100	MATH 1023	College Algebra
37-49	MATH 0033	Intermediate Algebra
27-36	MATH 0023	Introductory Algebra
27 or above	MTH 1023, MTH 1043 and MTH 1203*	
0-26	MATH 0013	Pre-Algebra

## COMPASS Pre-Algebra Test

## Score

46-100	MATH 0023	Introductory Algebra
46 or above	MTH 1023, MTH 1043 and MTH 1203*	
0-45	MATH 0013	Pre-Algebra

## COMPASS Writing Test

## Score

77-100	ENG 1003	Freshman English I
15-76	ENG 0023	Writing Fundamentals
0-14	ENG 0013	Language Fundamentals

## COMPASS Reading Test

## Score

85-100	Exempt	
53-84	READ 0033	Advanced Reading Techniques
0-52	READ 0013	College Reading Skills

\*\*The Associate of Arts Teaching has been approved and is no longer suspended.

Associate of Arts  
Teaching

The Associate of Arts Teaching (AAT) degree is currently suspended pending approval from Arkansas Department of Higher Education. Any student currently seeking the AAT

degree will be allowed to complete the program.

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**Science**

**CHEM 1003 Introduction to Chemistry / 3 credits (3 lec.)**

**Prerequisite: MATH 0023 Introductory Algebra or higher, or ACT Math score of 19 or higher, or ASSET Math score of 38 or higher on the Intermediate Algebra test.**

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**Criminal Justice**

**CRIM 2233 Law Enforcement Auxiliary Officer Course / 3 credits (3 lec.)**

**Prerequisite: Must be sponsored by criminal justice agency.**

This 110-hour course is required by the Commission of Law Enforcement Standards and Training (CLEST) for certification of auxiliary and part-time law enforcement officers. Course extensively covers constitutional law, civil rights, civil liability, probable cause, search and seizure, laws of arrest, report writing, law enforcement standards, ethics, first responder First Aid, court organization and testifying, patrol procedures, traffic enforcement, investigations, defensive tactics, and firearms qualification.

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**Associate of Applied Science**

**Fire Science**

**Required Courses**

			<b>Credits</b>
CA	1903	Introduction to Computer Concepts	3
ENG	1003	Freshman English I	3
ENG	1013	Freshman English II	3
EMS	2009	Emergency Medical Technician	9
FS	1002	Hazardous Materials for Firefighters	2
FS	1023	Firefighter I	3
FS	1033	Firefighter I-A	3
FS	1013	Fire Apparatus, Hydraulics, and Water Supply	3
FS	1093	Principles of Emergency Services	3
FS	2133	Fire Prevention	3
FS	2033	Building Construction for Firefighters	3
FS	2163	Fire Protection Systems	3
FS	2011	Fire Officer I, Module 1	1
FS	2021	Fire Officer I, Module 2	1
FS	2031	Fire Officer I, Module 3	1
MATH	0033	Intermediate Algebra (or higher)	3
PE	1002	Concepts of Fitness	2
		Social Science Elective	3
		FS or EMS Electives	5

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**Health Professions**

**One-Year Certificate**

This program is designed to prepare students for a variety of positions in health care. Stu-

dents should work with their advisor to design an individualized program of study to meet specific career goals.

<b>Common Educational Requirements</b>			<b>Credits</b>
CA	1903	Introduction to Computer Concepts	3
ENG	1003	Freshman English I	3
ZOOL	2004	Human Anatomy and Physiology I with lab	4
ZOOL	2414	Human Anatomy and Physiology II with lab	4
MEDL	1003	Medical Terminology	3
BIOL	2104	Microbiology with lab	4
ENG	1013	Freshman English II <b>OR</b>	
ENG	1023	Technical Writing	3
PSY	2513	Introduction to Psychology	3

One emphasis area required:

**Nursing Emphasis Requirements**

MTH	1213	Math for Nurses	3
NRS	2203	Basic Human Nutrition	3
PSY	2003	Human Growth and Development	3

**Respiratory Emphasis Requirements**

CHEM	1003	Introduction to Chemistry	3
GSP	1004	Physical Science with lab	4
MATH	1023	College Algebra	3

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**Associate of Applied Science  
Registered Nursing**

<b>General Education Requirements:</b>			<b>Credits</b>
ZOOL	2004	Human Anatomy & Physiology I with lab	4
ZOOL	2414	Human Anatomy & Physiology II with lab	4
BIOL	2104	Microbiology with lab	4
ENG	1003	Freshman English I	3
ENG	1013	Freshman English II	3
MATH	0033	Intermediate Algebra (or higher)+	3
MTH	1213	Math for Nurses+	3
NRS	2203	Basic Human Nutrition	3
PSY	2013	General Psychology <b>OR</b>	
PSY	2513	Introduction to Psychology	3
PSY	2003	Human Growth and Development	3
CA	1903	Introduction to Computer Concepts <b>OR</b>	
CIS	1013	Introduction to Computer Information Systems	3
<b>Total General Education Requirements:</b>			<b>36 hours</b>
<b>+Students must complete Intermediate Algebra or higher AND Math for Nurses.</b>			

**Tuition for Registered Nursing Core courses will be assessed as follows:**

**\$70 per credit hour for Arkansas Residents**

**\$182 per credit hour for Out-of-State Residents**

**An online testing fee of \$60 will be required each semester**

**Associate of Applied Science  
Respiratory Care**

*All students will be mandated by state law to be fingerprinted and have a criminal background check by the Arkansas State Police and the FBI, at the student's expense. Persons convicted of crimes may not be eligible to write state board examinations. See the Respiratory Care program director for additional information.*

<b>Pre-professional Courses</b>			<b>Credits</b>
BIOL	2104	Microbiology with lab	4
CA	1903	Introduction to Computer Concepts	3
CHEM	1003	Introduction to Chemistry	3
ENG	1003	Freshman English I	3
ENG	1013	Freshman English II <b>OR</b>	
ENG	1023	Technical Writing	3
GSP	1004	Physical Science with lab	4
MATH	1023	College Algebra	3
MEDL	1003	Medical Terminology	3
NRS	2203	Basic Human Nutrition	3
PSY	2513	Introduction to Psychology	3
ZOOL	2004	Human Anatomy and Physiology I with lab	4
ZOOL	2414	Human Anatomy and Physiology II with lab	4

<b>Professional Courses</b>			<b>Credits</b>
<b>Summer I</b>			
RES	1001	Beginning Pharmacology	1
RES	1005	Respiratory Care Sciences	5
<b>Summer II</b>			
RES	1105	Non-Critical Care	5
RES	1501	Respiratory Equipment Lab I	1
<b>Fall</b>			
RES	2004	Clinical Practicum I	4
RES	2003	Cardiopulmonary Anatomy & Physiology	3
RES	2103	Mechanical Ventilation I	3
RES	2203	Respiratory Critical Care	3
RES	2401	Respiratory Care Lab II	1
RES	1302	Internal Medicine I	2
<b>Spring</b>			
RES	2303	Mechanical Ventilation II	3
RES	2503	Neonatal and Pediatric Respiratory Care	3
RES	2007	Clinical Practicum II	7
RES	2102	Advanced Cardiopulmonary Evaluation	2
RES	2502	Internal Medicine II	2

## **Respiratory Care**

### **RES 1001 Beginning Pharmacology / 1 credit (1 lec.)**

Instruction in the process of medication administrations including calculations commonly used in preparing and administering drugs are presented, emphasizing the need for accuracy.

### **RES 1005 Respiratory Care Sciences / 5 credits (5 lec.)**

This course focuses on the scientific foundations of patient care in Respiratory Therapy. There are five units: *Math and Algebra*—this is a basic operations with an introduction to calculations used in Respiratory Care. *Chemistry*— this is a presentation of fundamental chemical principles and biochemistry applicable to patient care. *Physics*—Basic health science physics, including gas laws and flow/volume measurements applied to patient care and equipment operation. *Microbiology and Infection control*—Overview of disease-causing microorganisms with community and hospital-based precautions to prevent the spread of infection.

### **RES 1105 Non-Critical Care / 5 credits (5 lec.)**

A comprehensive study of topics and knowledge required for patient care at the subacute level through classroom instruction and laboratory experience preparing them for the clinical setting. Units include: *General Patient Care*—Introduces students to patient psychology, communication skills, record keeping, patient assessment, CPR, and essentials of Respiratory Care treatments. *Respiratory Care Pharmacology*—this unit continues where beginning Pharmacology left off and covers drugs used during advanced life support and mechanical ventilation of patients. *Medical Ethics*—Emphasizes the importance of legal and professional behavior and clear communication in the relationships between therapists and doctors, nurses, allied health personnel, and patients. *Medical Gas, Aerosol, and Humidity Therapy*—Students will be instructed in the use of oxygen and air delivery devices, medical gas safety codes and regulations, and hazards of use. Students will learn proper techniques for use of aerosol and humidity appliances. Students will be introduced to the basic principles of mechanical ventilation.

### **RES 1302 Internal Medicine I / 2 credits (2 lec.)**

The etiology, pathogenesis, manifestations, and management of common cardiopulmonary diseases are discussed. Focus of the course is on respiratory therapy management of diseases. Students will have a basic understanding of radiological finds, therapeutic modalities and patient interactions.

### **RES 2003 Cardiopulmonary Anatomy and Physiology / 3 credits (3 lec.)**

Study of anatomy and physiology of the respiratory and circulatory systems are explored in detail. Emphasis will be on the interaction of systems in gas exchange and acid-base balance and oxygen transport. The structure and function of the chest cage, mechanics of breathing, and control of respiration are also included.

Prerequisites: ZOOL 2004, Human A & P I and lab, and ZOOL 2414, Human A & P II and lab.

### **RES 2004 Clinical Practicum I / 4 credits (4 lab)**

This course involves students completing learning exercises in the practical laboratory and hospital procedures such as oxygen set-ups, medical gas cylinders, Arterial Blood Gas sampling and analysis, basic spirometry, and airway care.

**RES 2007 Clinical Practice II / 7 credits (7 lab and clinical)**

Advanced practice and development of efficient respiratory care techniques as well as observation and practice of Respiratory Care are covered. Students practice techniques necessary to carry out respiratory clinical care, floor care, and chronic care for adults, neonates and pediatric patients. Rotation affords students an opportunity to plan, implement, and evaluate respiratory care therapeutic modalities in adult patients on continuous mechanical ventilation. Emphasis is placed on critical thinking skills including decision making, problem solving, and consulting techniques.

Prerequisite: RES 2004, Clinical Practice I

**RES 2102 Advanced Cardiopulmonary Evaluation / 2 credits (2 lec.)**

Classroom, laboratory, and clinical presentation of complete Pulmonary Functions, Medical Imaging techniques, and diagnostic tests related to the practice of Respiratory Therapy.

**RES 2103 Mechanical Ventilation I / 3 credits (3 lec.)**

Introduction to principles of mechanical ventilation.

**RES 2203 Respiratory Critical Care / 3 credits (3 lec.)**

This is the study and practice of Respiratory Care for critically ill patients. Units include: *Airway Management*—Presents airway care in classroom, laboratory, and clinical settings. Students will become proficient in techniques of tracheotomy care, endotracheal intubation and extubation, endotracheal and nasotracheal suctioning and bronchial hygiene. *Physiologic Monitoring*—covers topics related to management of acute and chronic illness from Respiratory Care perspective. Students will learn patient assessment skills, ECGS, cardiovascular evaluation, stress testing, care of postoperative patients, and hemodynamic monitoring. *Critical Care Pharmacology*—An overview of drugs used in the critical care setting and their interactions with those administered by Respiratory Therapists.

Prerequisite: RES 1105 Respiratory Care Sciences and RES 1105 Non-Critical Respiratory Care

**RES 2303 Mechanical Ventilation II / 3 credits (3 lec.)**

Procedures for initiating ventilator use, ventilator management, troubleshooting and testing are covered in the classroom and students participate in supervised care of ventilator patients in hospital critical care units to include adult and neonatal ICU units.

Prerequisite: RES 2103, Mechanical Ventilation I

Co-requisite: RES 2007, Clinical Practice II

**RES 2502 Internal Medicine II / 2 credits (2 lec.)**

Continuation of Internal Medicine I

Prerequisite: RES 1302 Internal Medicine I

**RES 2503 Neonatal and Pediatric Respiratory Care / 3 credits (3 lec.)**

Therapy and procedures applied to the care of premature infants, sick infants, and pediatric patients. Students participate in supervised care of these patients in critical care areas.

