

# F R C S

## FUNDAMENTAL RESPIRATORY CARE SUPPORT COURSE



**aarc**  
American Association  
for Respiratory Care

# AT A GLANCE

In Collaboration With:



**AMERICAN RESPIRATORY  
CARE FOUNDATION**



Dear International Colleagues,

## ICRC Recommendation

The Governors of the ICRC voted unanimously to recommend the development of a standardized Fundamental Respiratory Care training course intended for implementation outside of the United States for health care providers not experienced in respiratory care as practiced in North America. The recommendation further stated that the course should be offered under the auspices of the ICRC and the AARC/ARCF. This recommendation was subsequently reaffirmed twice by the Council.

## Need for FRCS

The ICRC Governors and others identified the need in their home countries for health care workers properly and safely trained in respiratory therapy. In addition to the increased incidence of chronic lung diseases worldwide; there has been an increase in diseases such as COVID-19, Avian Flu, SARS, MERS, and other diseases that impact many countries worldwide. The response to this international health challenge has resulted in a recognized need by many countries to improve the expert knowledge of those professionals responsible for the diagnosis, treatment, and management of persons afflicted. Major drivers of this initiative are both the threat of pandemics, as well as the continuing rise of the incidence of chronic lung diseases.

## Course Purpose

**To provide a standardized fundamental respiratory therapy training program outside of the United States for health care providers. The course is intended to provide participants some fundamental knowledge and skill level to assist them in providing care for patients. The course is not intended to provide them with comprehensive expertise in the care of respiratory compromised patients. Course emphasis will be on the benefits of new knowledge and limited exposure to selected clinical skills. The FRCS is based on best practice standards and will be offered following identification of need and upon written invitation by the requesting entity. The course is intended to enhance the care of respiratory patients around the world by training individuals to properly and safely provide respiratory therapy procedures.**

## Course Design

**Due to the wide-ranging need and the disparity in the level of experience the curriculum is designed in a modular format and may be offered as a hybrid on line and onsite course. This design provides users with flexibility to request those topics which they need. The FRCS Course is composed of two parts: the Basic component which can be completed as a stand-alone course of instruction however, the Basic component is a pre-requisite for the Advanced course.**

In this regard, we have identified and invited experts in the field of Respiratory Care to contribute chapter content for the FRCS project. This document contains an overview of the project to date.

We are proud to say that 12 ICRC country governors have authored chapters for this important course.

Thank you and best regards

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**Hassan S. Alorainy, BsRC, RRT, FAARC**  
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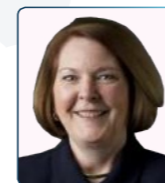
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## Goals & Objectives

At the conclusion of the complete course the participant will be exposed to:

- Assessment of needs for the respiratory compromised patient
- Appropriate Respiratory therapies and or modalities following assessment
- Application/administration of various Respiratory Care equipment and supplies
- Appropriate diagnostic tests
- Appropriate response to significant changes in respiratory status
- Appropriate intervention for acute/serious respiratory conditions
- Expert consultation and/or need to transfer patients
- Key elements of a pulmonary rehabilitation program
- Appropriate infection control procedures in Respiratory Care
- Elements included in a smoking/tobacco cessation program

## FRCS Basic & Advanced- Further Organizational Details:

**Both may be offered following a hybrid model of on-line and onsite instruction**

### Fundamental Respiratory Care Support – Basic

Consisting of lecture demonstrations, case studies, and practice Skill stations to expose health care providers not experienced in respiratory care to the knowledge and skills required to provide basic Respiratory Care for patients.

### Fundamental Respiratory Care Support – Advanced

Consisting of lecture demonstrations, case studies, and practice Skill stations to expose health care providers not experienced in respiratory care to the knowledge and skills required to provide more advanced Respiratory Care for patients.

## Target Audience

The FRCS Course is intended for implementation outside of the United States for health care providers not experienced in respiratory care as provided in North America and may include:

- Physicians with possible exception of Intensivists, Anesthesiologists, ER physicians.
- Nurses
- Emergency medical technicians
- General health care providers – as identified by requesting entity
- Long Term Facility clinical staff
- Pre-hospital providers
- Physician assistants
- Residents in training
- Respiratory Care staff/students
- Respiratory Care practitioners who would like to take refresher course

## Disclaimer:

Neither the ARCF nor the AARC/ ICRC, nor FRCS instructors certify competency or any level of knowledge or skill following completion of the course. Participants will be made aware that the course is not intended to provide them with comprehensive expertise in the care of respiratory compromised patients, but to provide some fundamental knowledge and skill level to assist them in providing care for patients. The emphasis will be on the benefits of new knowledge and limited exposure to selected skills. The ARCF, AARC and ICRC will issue a combined logo "Certificate of Completion" for the FRCS courses. In order to assure the quality and integrity of the standardized FRCS curriculum, the program must be presented according to the standardized print or electronic manual, and lesson plans.

## Instructor Criteria

May include RRT credentialed respiratory care practitioners, Intensivist physician, Pulmonologist, Anesthesiologist, and critical care nurse practitioners. To extend the quality, reach and influence of the standardized RT curriculum provided by the FRCS the "train the trainer" concept will be employed. Once faculty are trained and certified as FRCS Instructors they can in turn, train others according to FRCS standards.

### An FRCS Instructor Must:

- Be experienced in respiratory critical care
- Demonstrate understanding of FRCS lecture components and proficiency with Skill Stations.
- Successfully complete the FRCS Basic and Advanced Course
- Complete a review of the FRCS instructor syllabus with a Certified FRCS Instructor
- Receive the recommendation for instructor status after two teaching experiences in FRCS courses under the supervision of the FRCS Director or a Certified FRCS In structor
- Be a member in good standing of AARC.
- Teach in an instructor/provider course at least once every 2 years to maintain instructor status
- A minimum of two FRCS Instructors must be present for each course.
- The FRCS Director will issue FRCS Instructor Certificates, and maintain records on each instructor.
- Additional instructor qualifications may apply for physicians, respiratory care practitioners & other health care providers located outside the USA who do not hold US credentials.

## Organizational Structure

**FRCS Project Organizational Structure:** Establishment of the Fundamentals of Respiratory Care Support Course – Basic & Advanced by the ARCF in partnership with the AARC and ICRC:

- 1) **Steering Committee:** Sets & provides oversight for the fundamental strategic direction of the project and is responsible for final approval of Content Experts.
- 2) **FRCS Project Core Team:** Takes direction from the Steering Committee and provides the tactical planning and action plan to develop & maintain the project. The Committee will have a Chairperson & Vice Chairperson committee members will be distinguished by credential, experience and reputation.
- 3) **Content Expert Team:** Consists of individuals qualified by knowledge/credential & reputation to actually write the chapters and produce materials for the curriculum.

Funding for the project will be provided through restricted funds approved in the ARCF & AARC.

## Chapter 1: Introduction to Respiratory Care Profession



**Prof. Lynda T. Goodfellow, EdD, RRT, AE-C, FAARC**  
Professor and Senior Associate Dean for Academic Affairs  
Byrdine F. Lewis College of Nursing and Health Professions  
Georgia State University  
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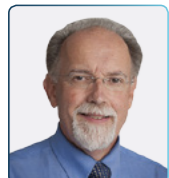
## Chapter 2: Ethical & Patient Safety Issues in Respiratory Care



**Shawna L. Strickland, PhD, CAE, RRT, RRT-NPS, RRT-ACCS, AE-C, FAARC**  
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American Epilepsy Society  
Adjunct Professor, College of Health Sciences Rush University  
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## Chapter 3: Respiratory System Anatomy & Physiology



**Prof. Will Beachey, PhD, RRT, FAARC**  
Professor Emeritus  
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School of Health Sciences  
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## Chapter 4: Overview of Common Cardiopulmonary Disorders



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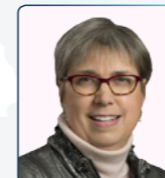
**Prof. Fengming Luo, MD, PhD**  
Professor of Medicine  
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## Chapter 5: Respiratory Assessment



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**Prof. Ellen Becker, PhD, RRT, RRT-NPS, RPFT, AE-C, FAARC**  
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## Chapter 6: Basic Oxygen Therapy



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Health Care Productions, INC.  
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## Chapter 7: Humidity Therapy



**Prof. Ruben D. Restrepo, MD, RRT, FAARC, FCCP**  
 Distinguished Teaching Professor  
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## Chapter 8: Aerosol Therapy



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 Associate Dean of Research at the College of Health Professions  
 Professor of Respiratory Therapy  
 Department of Respiratory Therapy and Sleep Center, Texas State University  
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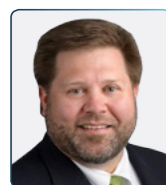
## Chapter 9: Infection Control



**Teresa A. Volsko, MBA, MHHS, RRT, FAARC**  
 Vice President, Quality and Data Integration  
 The Centers  
 Cleveland, Ohio, USA



## Chapter 10: Fundamentals of Respiratory Care Pharmacology



**Prof. Douglas S. Gardenhire, EdD, RRT, RRT-NPS, FAARC**  
 Chair and Clinical Professor  
 Governor's Teaching Fellow  
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 Lewis College of Nursing and Health Professions  
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## Chapter 11: Airway Management



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 Professor and Chairman  
 Department of Anesthesiology and Pain Medicine  
 College of Medicine, Seoul National University  
 President, Korean Society of Anesthesiologists (KSA)  
 President, Korean Association for Respiratory Care (KARC)  
 Auditor, Korean Society of Critical Care Medicine (KSCCM)  
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## Chapter 12: Cardiopulmonary Resuscitation



**Prof. Thomas A. Barnes, EdD, RRT, FAARC**  
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 Professor Emeritus of Cardiopulmonary Sciences  
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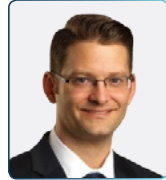
## Chapter 13: Suctioning, Airway Clearance & Lung Expansion Therapy



**Prof. Bruce K. Rubin MEngr, MD, MBA, FRCPC**  
 Jessie Ball duPont Distinguished Professor and  
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 Professor of Biomedical Engineering  
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## Chapter 14: Chest Imaging



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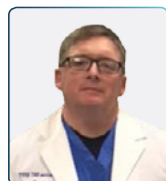
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**Andrew West, EdD, MAppSc(Resp), DipPH, FCSRT**  
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## Chapter 15: Pulmonary Function Testing, Techniques and Interpretation



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 Pulmonary Function Laboratory  
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## Chapter 16: Cardiopulmonary Disorders in Acute Respiratory Care



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## Chapter 17: Acid Base Balance, Blood Gas Analysis & Oxygenation



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 Physician Assistant Sciences, and Life Support Education Center  
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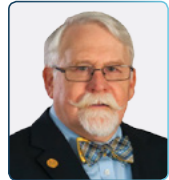
## Chapter 18: Ventilator Modes



**Ghazi A. Alotaibi, PhD, RRT**  
 Vice President for Academic Affairs  
 Associate Professor of Respiratory Care  
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## Chapter 19: Noninvasive Respiratory Support (HFNC, CPAP & NIV)



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## Chapter 23: Perioperative Respiratory Care



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## Chapter 20: Lung Protective Ventilation Approaches in Various Disease States



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## Chapter 24: New Therapeutic/ Diagnostic Medical Gases



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## Chapter 21: Liberation From Mechanical Ventilation



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Professor, Department of Anesthesiology  
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## Chapter 25: COPD Diagnosis, Management and Education



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## Chapter 22: Advanced Patient Monitoring & Wave Form Analysis



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## Chapter 26: Asthma Diagnosis, Management and Education



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**Chapter 27: Pulmonary Rehabilitation**


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**Chapter 28: Respiratory Home Care**


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**Chapter 29: Sleep Disorders**


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**Chapter 30: Hyperbaric Oxygen Therapy**


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**Chapter 31: Smoking/Tobacco Cessation Training**


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### Chapter 32: Pediatric Pathophysiology, Assessment and Monitoring



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### Chapter 33: Neonatal Pathophysiology, Assessment and Monitoring



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### Chapter 34: Neonatal & Pediatric Resuscitation



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### Chapter 35: Respiratory Intensive Care of Neonates



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### Chapter 36: Neonatal & Pediatric Ventilation



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