Subject:	RC
Course Number:	BSRC 371
Descriptive Title:	Principles of Evidence Based Medicine
Division:	Health Sciences and Athletics
Department:	Respiratory Care
Course Disciplines:	Respiratory Technologies
Catalog Description:	This course is an introduction to the practice of Evidence-Based Medicine (EBM) in the hospital setting. EBM aims for the ideal that healthcare professionals should make "conscientious, explicit, and judicious use of current best evidence" in their everyday practice. The student will learn the process of evidence synthesis which is using systematic reviews of the medical literature to evaluate the best evidence on specific clinical topics. Then, using the concept of knowledge translation, develop clinical practice procedures from the selected treatment options for specific cases based on the best research, patient preferences and individual patient characteristics.
Prerequisite:	Admission to El Camino College Respiratory Care BS Program Eligibility for RCP license in California: 1. Graduation from a CoARC accredited Respiratory Care Program 2. A.S. degree from an accredited Community College 3. Completion of the 39 required CSU-GE Transfer Pattern units (IGETC)
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	3
Hours Laboratory (per week):	0
Outside Study Hours:	6
Total Course Hours:	54
Course Units:	3
Grading Method:	Letter Grade only
Credit Status:	
Transfer CSU:	No
Effective Date:	
Transfer UC:	No
Effective Date:	
General Education ECC:	

Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	**SLO #1 EBM – Teaching Strategies** Demonstrate organizational and developmental skills when designing the final assignment dealing with developing and implementing instructional content using evidenced-based teaching strategies. **SLO #2 Evaluate Current Practice** Integrate the broad range of research skills learned across the curriculum when researching a project that evaluates current practices within the medical field. **SLO #3 EBM Data Analysis** Completion of the final assignment using the methodological approach, collection, measurement, and evidence-based medical data analysis.
Course Objectives:	1. Examine the basic concepts of research. 2. Examine the basic concepts of Evidence-Based Medicine. 3. Analyze the relationship between Evidence-Based Medicine and Research. 4. Develop skills needed in usage of Evidence-Based Medicine. 5. Select medical therapies in various situations using Evidence-Based Medicine.
Major Topics:	**I. Evidence-Based Medicine (8 hours, lecture)** A. History 1. Evolution 2. Purpose 3. Basic skills in using EBM B. Concepts 1. Background questions 2. Foreground questions **II. Research and Evidence-Based Medicine (10 hours, lecture)** A. Procedures 1. Ask 2. Acquire 3. Appraise 4. Apply 5. Assess B. Reporting 1. Assessing the results 2. Disseminating the results **III. Technical Skills in usage of Evidence-Based Medicine (18 hours, lecture)**

	A. Research 1. Primary Study Types 2. Secondary Study Resources 3. Determining Validity B. Organizational 1. Review of medical policies, programs, and practices with EBM C. Developmental 1. EBM tool kit **IV. Practical Application of Evidence-Based Medicine (18 hours, lecture)** A. Problem solving medical issues using EBM
Total Lecture Hours:	54
Total Laboratory Hours:	0
Total Hours:	54
Primary Method of Evaluation:	1) Substantial writing assignments
Typical Assignment Using Primary Method of Evaluation:	After researching the use of mRNA vaccines develop a vaccination plan for patients Post-mechanical ventilation and include justification for your plan based on the evidence found in your research.
Critical Thinking Assignment 1:	Research COVID-19 pediatric patients and the current CDC plan of isolation used on admission of these patients and include analysis of your hospital plan and any modification with justification to that plan.
Critical Thinking Assignment 2:	Examine the use of non-steroidal pulmonary medicines with the use of steroids in patients with emphysema and select as well as justify the most appropriate combination of these medications for an exacerbation of this patient's condition.
Other Evaluation Methods:	Reading Reports, Term or Other Papers, Written Homework
If Other:	
Instructional Methods:	Discussion, Lecture, Multimedia presentations
If other:	
Work Outside of Class:	Problem solving activity, Required reading, Study, Written work (such as essay/composition/report/analysis/research)
If Other:	
Up-To-Date Representative Textbooks:	Heather R. Hall. Evidence-Based Practice: An Integrative Approach to research, Administration, and Practice. 3rd ed. Jones &Bartlett Learning, 2020 Michael Glass. Pulmonary Medicine: An Evidence Based Approach. American Medical Publishers, 2022
Alternative Textbooks:	
Required Supplementary Readings:	
Other Required Materials:	
Requisite	
Category	
Requisite course:	

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	Admission to El Camino College Respiratory Care BS Program Eligibility for RCP license in California Graduation from a CoARC accredited Respiratory Care Program AS Degree from an accredited community college
Requisite Skill and Matching skill(s): Bold the requisite skill(s). if applicable	To receive a Baccalaureate of Science degree in Respiratory Care, students are required to meet the minimum eligibility requirements for Respiratory Care license in California. These are: 1. 39 units of CSU-GE transferable units from an accredited community college. 2. 40 units are credited to the A.S. Respiratory Care degree courses.
Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). if applicable	
Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Roy Mekaru
Date:	11/7/2022
Original Board Approval Date:	01/17/2023