

## University of Hawaii Maui College NURS 366 - Adv Cardiopul

**1. Course Alpha. Please click on the ? to the right for help.**

NURS

**2. Course Number. Please click on the ? to the right for help.**

366

**3. Course Title/Catalog Title. Please click on the ? to the right for help.**

Adv Cardiopul

**4. Number of Credits. Please click on the ? to the right for help.**

3

**5. Contact Hours/Type. Please click on the ? to the right for help.**

- Hour lecture (3)

**6. Course Description. Please click on the ? to the right for help.**

Develops advanced nursing theory related to the care of clients and the support of significant others for clients with cardiopulmonary dysfunction. Focuses on anatomy, physiology and physical assessment of the cardiac and respiratory system. Application of the nursing process to specific cardiac and respiratory disorders.

**7. Pre-Requisites. Please click on the ? to the right for help.**

NURS 230 with grade B or better, or licensed RN, or consent.

**8. Co-requisites.**

**9. Recommended Preparation.**

**10. Is this a cross-listed course? Please click on the ? to the right for help.**

NO

**11. Reason for Proposal. Why is this course being proposed or modified? This question requires specific information as part of the explanation. Please click on the ? to the right for help.**

correct pre-requisite

**12. Effective Semester and Year. For new or modified courses, the effective year is one year from the semester proposed. For example, if proposed in Spring 2012, the effective**

semester is Spring 2013. Please click on the ? to the right for help.

Spring 2015

**13. Grading Method. What grading methods may be used for this course? Please click on the ? to the right for help.**

- Letter grade only/Audit (0)

Nursing Program does not use credit/no credit

**14. Is this course repeatable for credit? How often can this course be counted toward a degree or certificate? Please click on the ? to the right for help.**

NO

**15. Course Student Learning Outcomes (SLOs). DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE LEARNING OUTCOMES" and enter in that screen. Please click on the ? to the right for help.**

Course SLO/Competency	A	B	C	D	E	F	G	H	I
I. Analyze ethical and legal concerns that are experienced by clients, families, and nurses associated with acute client care including the dying process.								<input checked="" type="checkbox"/>	
II. Incorporate evidence based interventions in providing care to groups of clients. Propose adjustments to plan of care after reflecting on clients' level of comfort, and ability to manage symptoms .						<input checked="" type="checkbox"/>			
III. Incorporate knowledge of physiology and alterations in regulatory mechanisms to provide rationale for identification of risk factors and clinical manifestations of pathologic processes seen in the critical care environment.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
IV. Demonstrate clinical judgment in the delivery of safe care to clients in the critical care settings.						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>

LEGEND

- A. Describe anatomic structures and function of the cardiac and respiratory systems and common pathological changes leading to critical care admission.
- B. Analyze arterial blood gas values, hemodynamic monitoring, SVO2 serial data and determine client progress, including the physiologic abnormalities that lead to abnormal results.
- C. Demonstrate a systematic process for assessment of the cardiac and pulmonary systems. Interpret physical assessment data.
- D. Describe the physiologic concepts of hemodynamic monitoring and the techniques utilized in the care of the critically ill client.
- E. Describe the physiologic and psychologic consequences of ventilator therapy in terms of etiology, probable complications and preventive measures.
- F. Utilize the nursing process to develop an evidenced based intervention plan for critically ill clients with selected cardiac and respiratory disorders.
- G. Utilize on-line computer technology to access information, collaborate with colleagues, and complete evaluation procedures.
- H. Describe the key ethical and psychosocial issues for caregiver, client, and significant others in the critical care environment.
- I. Demonstrate clinical judgment in simulated critical care situations.

Course SLO/PSLO	A	B	C	D	E
-----------------	---	---	---	---	---

I. Analyze ethical and legal concerns that are experienced by clients, families, and nurses associated with acute client care including the dying process.	<input checked="" type="checkbox"/>				
II. Incorporate evidence based interventions in providing care to groups of clients. Propose adjustments to plan of care after reflecting on clients' level of comfort, and ability to manage symptoms .		<input checked="" type="checkbox"/>			
III. Incorporate knowledge of physiology and alterations in regulatory mechanisms to provide rationale for identification of risk factors and clinical manifestations of pathologic processes seen in the critical care environment.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
IV. Demonstrate clinical judgment in the delivery of safe care to clients in the critical care settings.					<input checked="" type="checkbox"/>

## LEGEND

**A. 1. A competent nurse's professional actions are based on core nursing values, professional standards of practice, and the law.**

1.1 Core nursing values include social justice (from the ANA statement), caring, advocacy, respect for self and others, collegiality, and ethical behavior

1.2 Ethical dilemmas are embedded in clinical practice; an obligation of nurses is to notice, interpret respond and reflect on these dilemmas using ethical principles and frameworks as a guideline

1.3 It is essential for nurses to participate in discussions of ethical issues in health care as they affect communities, society, and health professions

1.4 Professional nursing functions within legally defined standards of practice and state specific regulations

**B. 3. A competent nurse engages in ongoing self-directed learning and provides care based on evidence supported by research with the understanding that . . .**

3.1 Knowledge and skills are dynamic and evolving, in order to maintain competency one must continuously update their knowledge using reliable, current sources of information from the biological, social, medical, public health, and nursing sciences

3.2 The nurse uses legitimate sources of evidence for decision-making such as research evidence, standards of care, community perspectives and practical wisdom gained from experience

3.3 As "best practices" are continuously modified and new interventions are constant, the nurse incorporates changes into practice

**C. 7. A competent nurse practices client-centered care**

7.1 Effective care is centered around a respectful relationship with the client that is based on empathy, caring, mutual trust, and advocacy

7.2 Nursing practice should reflect the attitudes, beliefs and values of clients

7.3 An understanding of the culture and history of the community is fundamental in the practice of nursing

**D. 8. A competent nurse communicates effectively through the understanding that ...**

8.1 Effective use of communication is an essential part of all interventions to establish caring and therapeutic relationships to educate and advocate for clients

8.2 When working with colleagues or clients, it is important to insure that accurate, timely and complete communication has occurred

8.3 Successful communication requires attention to elements of cultural influences, variations in the use of language and a participatory approach

**E. 9. A competent nurse demonstrates clinical judgment/critical thinking in the delivery of care of clients while maintaining safety through:**

9.1 Analysis and integration of available data

9.2 Implementation of prioritized care based on evaluation of data

9.3 Evaluation and analysis of the nurses' personal clinical performance

9.4 A competent nurse engages in risk reduction activities, recognize, communicate and intervene to promote client safety

**16. Course Competencies. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE COMPETENCIES/ISSUES/SKILLS" and enter text in that screen. Course competencies are smaller, simpler tasks that connect to and facilitate the SLOs.**

Competency
Describe anatomic structures and function of the cardiac and respiratory systems and common pathological changes leading to critical care admission.
Analyze arterial blood gas values, hemodynamic monitoring, SVO <sub>2</sub> serial data and determine client progress, including the physiologic abnormalities that lead to abnormal results.
Demonstrate a systematic process for assessment of the cardiac and pulmonary systems. Interpret physical assessment data.
Describe the physiologic concepts of hemodynamic monitoring and the techniques utilized in the care of the critically ill client.
Describe the physiologic and psychologic consequences of ventilator therapy in terms of etiology, probable complications and preventive measures.
Utilize the nursing process to develop an evidenced based intervention plan for critically ill clients with selected cardiac and respiratory disorders.
Utilize on-line computer technology to access information, collaborate with colleagues, and complete evaluation procedures.
Describe the key ethical and psychosocial issues for caregiver, client, and significant others in the critical care environment.
Demonstrate clinical judgment in simulated critical care situations.

**17. Recommended Course Content and Timeline. The course content facilitates the course competencies. Course content may be organized by weeks, units, topics or the like.**

Week 1 Introduction, Course Requirements Ethics in Critical Care & Emergency Room  
Basic concepts in critical care, ABGs, Electrolytes, Enzymes I g, h

Week 2 Functional cardiac anatomy Dissection of cow heart & cannulation of coronary arteries.  
Ih, III a,b,c, IV i

Week 3 Cardiac Physiology. pathophysiology, and implications in critical care IIIa, b, c, i, IV b, i

Week 4 Cardiac physical assessment, and diagnostic tests utilized in critical care. III b, c, d, i

Week 5 Analysis of hemodynamic monitoring and procedures with hemodynamic monitoring. II & IIIa-f, IV b-i.,

Week 6 Cardiac Case Study 1 Aortic Stenosis, cardiac catheterization, valve replacement II b-i, IV i  
Cardiac Case Study 2 Cardiomyopathy, medical surgical treatments. II b-i, IV i

Week 7 Cardiac Case Study 3 MI, Thrombolytic therapy, pacemakers. II b-i, IV i

Cardiac Case Study 4 Cardiogenic Shock, Intraaortic balloon pump, left ventricular assist devices. II b-i, IV i

- Week 8 Functional Respiratory anatomy, complications of Artificial airways and intubation. IIIa, b, c, i, IV b, i
- Week 9 Respiratory physiology, pathophysiology and implications in critical care. III a,b, c, i, IV b, i
- Week 10 Pulmonary physical assessment and diagnostic tests used in the critical care setting. III a,b, c, i, IV b, i
- Week 11 Therapeutic Management, bi-pap, mechanical ventilation and related therapies. II & IIIb-f, IV b-i.,
- Week 12 Respiratory Case Study 1 COPD, Pneumonia, Intubation & mechanical ventilation. II b-i, IV i  
 Respiratory Case Study 2 Lung Cancer, pneumonectomy, and pulmonary rehabilitation. II b-i, IV i
- Week 13 Respiratory Case Study 3 Adult Respiratory Distress Syndrome & PEEP. II b-i, IV i  
 Respiratory Case Study 4-Asthma Cardiac & Respiratory Emergencies
- Week 14 Review for Final Exam
- Week 15 Final Exam

**18. Program Learning Outcomes. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "PLOs" and enter text in that screen. Program Student Learning Outcomes (PLOs) supported by this course. If you are not a "program" use the Liberal Arts PLOs, view them by clicking on ? icon to the right.**

<p>Program SLO</p> <p><b>1. A competent nurse’s professional actions are based on core nursing values, professional standards of practice, and the law.</b></p> <p>1.1 Core nursing values include social justice (from the ANA statement), caring, advocacy, respect for self and others, collegiality, and ethical behavior</p> <p>1.2 Ethical dilemmas are embedded in clinical practice; an obligation of nurses is to notice, interpret respond and reflect on these dilemmas using ethical principles and frameworks as a guideline</p> <p>1.3 It is essential for nurses to participate in discussions of ethical issues in health care as they affect communities, society, and health professions</p> <p>1.4 Professional nursing functions within legally defined standards of practice and state specific regulations</p>
<p><b>3. A competent nurse engages in ongoing self-directed learning and provides care based on evidence supported by research with the understanding that . . .</b></p> <p>3.1 Knowledge and skills are dynamic and evolving, in order to maintain competency one must continuously update their knowledge using reliable, current sources of information from the biological, social, medical, public health, and nursing sciences</p> <p>3.2 The nurse uses legitimate sources of evidence for decision-making such as research evidence, standards of care, community perspectives and practical wisdom gained from experience</p> <p>3.3 As “best practices” are continuously modified and new interventions are constant, the nurse incorporates changes into practice</p>
<p><b>7. A competent nurse practices client-centered care</b></p> <p>7.1 Effective care is centered around a respectful relationship with the client that is based on empathy, caring, mutual trust, and advocacy</p>

7.2 Nursing practice should reflect the attitudes, beliefs and values of clients

7.3 An understanding of the culture and history of the community is fundamental in the practice of nursing

**8. A competent nurse communicates effectively through the understanding that ...**

8.1 Effective use of communication is an essential part of all interventions to establish caring and therapeutic relationships to educate and advocate for clients

8.2 When working with colleagues or clients, it is important to insure that accurate, timely and complete communication has occurred

8.3 Successful communication requires attention to elements of cultural influences, variations in the use of language and a participatory approach

**9. A competent nurse demonstrates clinical judgment/critical thinking in the delivery of care of clients while maintaining safety through:**

9.1 Analysis and integration of available data

9.2 Implementation of prioritized care based on evaluation of data

9.3 Evaluation and analysis of the nurses' personal clinical performance

9.4 A competent nurse engages in risk reduction activities, recognize, communicate and intervene to promote client safety

19. **College-wide Academic Student Learning Outcomes (CASLOs). FIRST, fill out the CASLO grid located in the UHMC tab above. Click on the HELP icon for tips on determining support for the CASLOs and indicate your choices below by clicking on the box in front of each supported CASLO. NOTE: Our campus does not use the Preparatory Level, Level 1 and Level 2 designations in the chart below.**

	<b>Creativity</b> - Able to express originality through a variety of forms.
<input checked="" type="checkbox"/>	<b>Critical Thinking</b> - Apply critical thinking skills to effectively address the challenges and solve problems.  <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	<b>Information Retrieval and Technology</b> - Access, evaluate, and utilize information effectively, ethically, and responsibly.  <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	<b>Oral Communication</b> - Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.  <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	<b>Quantitative Reasoning</b> - Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.

<input checked="" type="checkbox"/>	Preparatory Level
<input checked="" type="checkbox"/>	<b>Written Communication</b> - Write effectively to convey ideas that meet the needs of specific audiences and purposes.
<input checked="" type="checkbox"/>	Preparatory Level

GenED SLO
Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.
Information Retrieval and Technology - Access, evaluate, and utilize information effectively, ethically, and responsibly.
Oral Communication - Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.
Quantitative Reasoning - Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.
Written Communication - Write effectively to convey ideas that meet the needs of specific audiences and purposes.

**20. Linking. CLICK ON CHAIN LINK ICON IN UPPER RIGHT HAND CORNER TO BEGIN LINKING. Please click on the ? to the right for help.**

**21. Method(s) of delivery appropriate for this course. Please click on the ? to the right for help.**

- Cable TV (0)
- HITS/Interactive TV (0)
- Hybrid (0)
- Online (0)

**22. Text and Materials, Reference Materials, and Auxiliary Materials. Please click on the ? to the right for help.**

Urden, L., Stacy, K. & Lough, M. *Thelan's Critical Care Nursing w/ CD* . Elsevier (current edition)

**23. Maximum enrollment. Please click on the ? to the right for help.**

35

**24. Particular room type requirement. Is this course restricted to particular room type? Please click on the ? to the right for help.**

NO

**25. Special scheduling considerations. Are there special scheduling considerations for this course? Please click on the ? to the right for help.**

NO

**26. Are special or additional resources needed for this course? Please click on the ? to the right for help.**

no

**27. Does this course require special fees to be paid for by students? Please click on the ? to the right for help.**

NO

**28. Does this course change the number of required credit hours in a degree or certificate? Please click on the ? to the right for help.**

no

**29. Course designation(s) for the Liberal Arts A.A. degree and/or for the college's other associate degrees. Please click on the ? to the right for help.**

Degree	Program	Category
Associate in Arts:		
AS:	Allied Health - Registered Nurse	PE - Program Elective
AAS:		
BAS:		
Developmental/ Remedial:		

**30. Course designation(s) for other colleges in the UH system.**

none

**31. Indicate the year and page # of UHMC catalog referred to. For new or modified courses, please indicate the catalog pages that need to be modified and provide a sheet outlining those changes.**

2014-15 Catalog p.136

**32. College-wide Academic Student Learner Outcomes (CASLOs). Please click on the HELP icon for more information.**

Standard 1 - Written Communication Write effectively to convey ideas that meet the needs of specific audiences and purposes.		
Outcome 1.1 - Use writing to discover and articulate ideas.		3
Outcome 1.2 - Identify and analyze the audience and purpose for any intended communication.		3
Outcome 1.3 - Choose language, style, and organization appropriate to particular purposes and audiences.		3



Outcome 1.4 - Gather information and document sources appropriately.	3
Outcome 1.5 - Express a main idea as a thesis, hypothesis, or other appropriate statement.	3
Outcome 1.6 - Develop a main idea clearly and concisely with appropriate content.	3
Outcome 1.7 - Demonstrate a mastery of the conventions of writing, including grammar, spelling, and mechanics.	3
Outcome 1.8 - Demonstrate proficiency in revision and editing.	3
Outcome 1.9 - Develop a personal voice in written communication.	1
Standard 2 - Quantitative Reasoning Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.	
Outcome 2.1 - Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately.	3
Outcome 2.2 - Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate.	3
Outcome 2.3 - Communicate clearly and concisely the methods and results of quantitative problem solving.	3
Outcome 2.4 - Formulate and test hypotheses using numerical experimentation.	0
Outcome 2.5 - Define quantitative issues and problems, gather relevant information, analyze that information, and present results.	3
Outcome 2.6 - Assess the validity of statistical conclusions.	0
Standard 3 - Information Retrieval and Technology. Access, evaluate, and utilize information effectively, ethically, and responsibly.	
Outcome 3.1 - Use print and electronic information technology ethically and responsibly.	3
Outcome 3.2 - Demonstrate knowledge of basic vocabulary, concepts, and operations of information retrieval and technology.	2
Outcome 3.3 - Recognize, identify, and define an information need.	3
Outcome 3.4 - Access and retrieve information through print and electronic media, evaluating the accuracy and authenticity of that information.	3
Outcome 3.5 - Create, manage, organize, and communicate information through electronic media.	1
Outcome 3.6 - Recognize changing technologies and make informed choices about their appropriateness and use.	1
Standard 4 - Oral Communication Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.	
Outcome 4.1 - Identify and analyze the audience and purpose of any intended communication.	3
Outcome 4.2 - Gather, evaluate, select, and organize information for the	3

communication.		
Outcome 4.3 - Use language, techniques, and strategies appropriate to the audience and occasion.		3
Outcome 4.4 - Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion.		3
Outcome 4.5 - Summarize, analyze, and evaluate oral communications and ask coherent questions as needed.		3
Outcome 4.6 - Use competent oral expression to initiate and sustain discussions.		3
Standard 5 - Critical Thinking Apply critical thinking skills to effectively address the challenges and solve problems.		
Outcome 5.1 - Identify and state problems, issues, arguments, and questions contained in a body of information.		3
Outcome 5.2 - Identify and analyze assumptions and underlying points of view relating to an issue or problem.		3
Outcome 5.3 - Formulate research questions that require descriptive and explanatory analyses.		3
Outcome 5.4 - Recognize and understand multiple modes of inquiry, including investigative methods based on observation and analysis.		3
Outcome 5.5 - Evaluate a problem, distinguishing between relevant and irrelevant facts, opinions, assumptions, issues, values, and biases through the use of appropriate evidence.		3
Outcome 5.6 - Apply problem-solving techniques and skills, including the rules of logic and logical sequence.		3
Outcome 5.7 - Synthesize information from various sources, drawing appropriate conclusions.		3
Outcome 5.8 - Communicate clearly and concisely the methods and results of logical reasoning.		3
Outcome 5.9 - Reflect upon and evaluate their thought processes, value system, and world views in comparison to those of others.		3
Standard 6 - Creativity Able to express originality through a variety of forms.		
Outcome 6.1: Generate responses to problems and challenges through intuition and non-linear thinking.		0
Outcome 6.2: Explore diverse approaches to solving a problem or addressing a challenge.		0
Outcome 6.3: Sustain engagement in activities without a preconceived purpose.		0
Outcome 6.4: Apply creative principles to discover and express new ideas.		0
Outcome 6.5: Demonstrate the ability to trust and follow one's instincts in the absence of external direction		0
Outcome 6.6: Build upon or adapt the ideas of others to create novel expressions or new solutions.		0

### 33. Additional Information