

WEST HILLS COLLEGE LEMOORE
COURSE OUTLINE OF RECORD (COR)

FACULTY ORIGINATOR: Cynthia Dolata

DATE: 8/14/2012

NEW COURSE PROPOSAL COURSE REVISION

CHECKLIST: (check all that apply)

- Course Revision Form
- New Course Proposal
- Course Outline
- Learning Resources Statement
- Distance Education (DE) Addendum
- Adopted Textbook Form
- Form A Prerequisite
- Form B Prerequisite
- Form C Limitations on Enrollment

MIS DATA: (Administrative Use Only)

TOP Code: [Click here to enter text.](#)
Credit Status: [Choose an item.](#)
Basic Skills Status: [Choose an item.](#)
SAM Code: [Choose an item.](#)
Prior to College Level: [Choose an item.](#)
Noncredit Category:
Funding Agency Category:

ROUTING: (must be filled out prior to agenda submission)

Originating faculty: Cynthia Dolata Date: 8/14/2012
Comments: [Click here to enter text.](#)

Curriculum Representative: Leslie Catron Date: 11/30/2012
Comments: [Click here to enter text.](#)

Technical Review: [Click here to enter text.](#) Date: [Click here to enter a date.](#)
Comments: [Click here to enter text.](#)

Chief Instructional Officer: [Click here to enter text.](#) Date: [Click here to enter a date.](#)
Comments: [Click here to enter text.](#)

COURSE REVISION (use for existing courses only)

RULE OF SEVEN – There are seven course characteristics which require approval of the West Hills College Lemoore Curriculum Committee if the course is common to both colleges. Check any of the following characteristics that are being changed:

- Course Number
- Course Title
- Course Prefix
- Units
- Transferability
- Prerequisite(s)
- Course Objectives

OTHER CHANGES – check all that apply

- | | |
|--|---|
| <input checked="" type="checkbox"/> Five Year Review | <input checked="" type="checkbox"/> Instructional Methodologies |
| <input type="checkbox"/> Grading Option | <input type="checkbox"/> Cultural Pluralism |
| <input type="checkbox"/> Advisory/Prerequisite/Corequisite | <input checked="" type="checkbox"/> Textbook |
| <input type="checkbox"/> Catalog Description | <input type="checkbox"/> Distance Education Addendum |
| <input type="checkbox"/> Course Objectives | <input type="checkbox"/> Critical Thinking Assignments |
| <input type="checkbox"/> Course Content | <input checked="" type="checkbox"/> Methods of Assessment |

LEARNING AREA APPROVAL

- Changes or revisions to the curriculum have been discussed with learning area faculty.
- Supporting evidence attached at the end of the document (i.e., emails with header information, learning area minutes with attendees, etc.)

NEW COURSE PROPOSAL (use for new courses only)

Total Units:	Semester Lecture Hrs:	Semester Lab Hrs:
Transferability (attach evidence):	<input type="checkbox"/> CSU	<input type="checkbox"/> UC
New Major?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, state the new major:</i>	<i>Click here to enter text.</i>	
Intended for Transfer?	<input type="checkbox"/> Yes (complete next row)	<input type="checkbox"/> No
<input type="checkbox"/> Transfer Elective	<input type="checkbox"/> Transfer General Education	<input type="checkbox"/> Transfer Major Requirement
Associate Degree?	<input type="checkbox"/> Yes (complete next row)	<input type="checkbox"/> No
<input type="checkbox"/> AA/AS Elective	<input type="checkbox"/> AA/AS General Education	<input type="checkbox"/> AA/AS Major Requirement
Certificate Program?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, state the certificate:</i>	<i>Click here to enter text.</i>	

COURSE PREFIX and NUMBER: NURS 10L
COURSE TITLE: Medical-Surgical Nursing IV Lab
INSTRUCTIONAL AREA: HEALTH AND WELLNESS

Room Space Requirements: [Click here to enter text.](#)
Staff Requirements: [Click here to enter text.](#)
Equipment Requirements: [Click here to enter text.](#)

COURSE OUTLINE (use for all courses)

UNITS: **4.5** Semester Lecture Hrs: Semester Lab Hrs: 243
Grading (check all that apply): Standard: Pass/No Pass
Special: Students must achieve a 77%
Repeatable for Credit? Yes *Maximum number of times taken for credit:* No
Materials Fee: \$ *Material Description:*

1. Course/Catalog Description

NURS 10L focuses on advanced application of the nursing process in the care of critically ill adult and geriatric patients. The student will organize and discriminate data to establish priorities of care. Correlated clinical experiences emphasize refinement of clinical decision making, psychomotor skills, and management of patient care in professional nursing practice.

2. Prerequisites (List course prefix, number, and title) Not applicable

Successful completion of the following :

- BIO 32 (Human Anatomy)
- BIO 35 (Human Physiology)
- BIO 38 (Microbiology)
- NUT 1 (Basic Nutrition)
- PSYCH 1 (General Psychology)
- ENG 1A (Composition and Reading)
- CHEM 2A (Introductory Chemistry)

Choose one:

- SOC 1 (Introduction to Sociology)
- SOC 2 (Critical Thinking Social Problems)
- ANTHRO 2 (Introduction to Cultural Anthropology)

Choose one:

- COM 1 (Elements of Speech)
- COM 4 (Small Group Dynamics and Presentation)

- NURS 1 (Foundations of Nursing)
- NURS 1L (Foundations of Nursing Lab)
- NURS 2 (Medical Surgical Nursing I)
- NURS 2L (Medical Surgical Nursing I Lab)
- NURS 3 (Basic Pharmacology)
- NURS 4 (Medical Surgical Nursing II)
- NURS 4L (Medical Surgical Nursing II Lab)
- NURS 5 (Obstetrics-Maternity Nursing)
- NURS 5L (Obstetrics-Maternity Nursing Lab)
- NURS 6 (Advanced Pharmacology)
- NURS 7 (Medical-Surgical Nursing III)
- NURS 7L (Medical-Surgical Nursing III Lab)

COURSE PREFIX and NUMBER: NURS 10L
COURSE TITLE: Medical-Surgical Nursing IV Lab
INSTRUCTIONAL AREA: HEALTH AND WELLNESS

NURS 8 (Mental Health-Psychiatric Nursing)
NURS 8L (Mental Health-Psychiatric Nursing Lab)
NURS 9 (Pediatric Nursing)
NURS 9L (Pediatric Nursing Lab)
NURS 14A (Foundations Learning Lab)
NURS 14B (Pharmacology/Obstetrical Learning Lab)
NURS 14C (Specialty Nursing Learning Lab)
LVN to RN Bridge Students: NURS 12 (Role Transition) and NURS 12L (Role Transition Lab), LVN license
Health and Safety Requirements

3. Corequisites (List course prefix, number, and title) Not applicable

Concurrent enrollment in NURS 10 (Medical-Surgical Nursing IV)

4. Advisories (List course prefix, number, and title) Not applicable

5. Enrollment Limitations (Describe health/safety, audition, tryout, or cohort limitation) Not applicable

6. Course Objectives (Number each objective; objectives must define the exit skills required of students; use measurable objectives only; courses that allow repeatability must specify objectives for each time the course can be repeated)

Upon completion of the course the student will be able to meet the following objectives:

Module I – Altered Oxygenation: Cardiovascular

- A. Differentiate the advanced preparation of the critical care nurse, and describe the role and functions of the critical care nurse.
- B. Describe the advanced cardiac patient assessment, including hemodynamic monitoring.
- C. Interpret EKG rhythms and differentiate among the lethal cardiac rhythms, and nursing implementations related to each, including code blue procedures.
- D. Explain the pathophysiology and apply the nursing process to complicated myocardial infarction (MI), cardiac valve stenosis/regurgitation, cardiogenic shock, cardiac tamponade, disseminated intracoagulopathy (DIC).
- E. Identify and describe cardiac medications used in the critical care environment.

Module II – Altered Oxygenation: Respiratory

- A. Differentiate between early and late clinical manifestations of Acute Respiratory Failure (ARDS).
- B. Select collaborative care options for treating Acute Respiratory Failure (ARDS).
- C. Describe the nursing and collaborative management of Acute Respiratory Failure (ARDS).

Module III – Alteration in Neurological Function

- A. Discuss the care of the client with a spinal cord injury.

Module IV– Altered Senses: Pain

- A. Analyze critical nursing interventions for sedation, pain control for neuromuscular blockade, and continuous intravenous infusions for sedation.
- B. Compare and contrast medically induce coma and therapeutic paralysis.
- C. Describe pain management of the burn patient.

- Module V– Altered Metabolic Function
 - A. Describe the care of the client with diabetic ketoacidosis.
 - B. Differentiate between hyperosmolar hyperglycemic nonketotic syndrome, and hypoglycemia.
 - C. Compare and analyze chronic and acute complications of diabetes mellitus.
 - D. Describe the related changes for a gerontological client with diabetes mellitus.
- Module VI– Altered Fluid and Electrolytes: Burns
 - A. Discuss the types, causative agents and burn classifications by depth and extent of injury.
 - B. Discuss the systemic pathophysiological effects of a major burn.
 - C. Discuss the nursing and collaborative management of the burn client during the emergent phase.
 - D. Discuss the nursing and collaborative management of the burn client during the acute phase.
 - E. Discuss the nursing and collaborative management of the burn client during the rehabilitative phase.
- Module VII– Altered Elimination: GI/Biliary/Hepatic
 - A. Analyze specific principles of nursing care for the client with acute and end stage liver disease.
 - B. Discuss liver transplantation and the collaborative management necessary for care.
 - C. Apply techniques of therapeutic communication to patients and families in crisis.
 - D. Discuss ethical issues related to organ donation and end-of-life issues.
- Module VIII – Altered Elimination: Renal
 - A. Differentiate between acute and chronic renal failure/end stage renal disease (ESRD).
 - B. Relate the general principles and types of dialysis.
 - C. Discuss renal transplantation and the collaborative management necessary for care.
- Module IX – Altered Immunity
 - A. Analyze the relationship between severe acute respiratory syndrome (SARS), and multi-system organ failure (MODS).
 - B. Review types of shock.
- Module X – Altered Conditions: Trauma-Overdose-Withdrawal/Abuse/Terrorism/Disaster
 - A. Describe advanced patient assessment and triage.
 - B. Explain the pathophysiology and apply the nursing process to traumatic injury, chemical overdose, withdrawal, and abuse.
 - C. Analyze disaster planning and response to include bioterrorism.
- Module XI– Leadership
 - A. Describe the role of the nurse leader in conflict management.
 - B. Identify the purposes and needs for nurse licensure, the significance of nurse practice acts, and implications of regulatory agencies.
 - C. Describe the decision making process.
 - D. Discuss employment issues that affect the new graduate nurse.

7. Course Content Lecture(Use outline format with letters for differentiating major topics and numbers for subtopics ; list major topics or lesson units; differentiate content of each level, when levels are assigned)

8. Course Content Lab (Use outline format with letters for differentiating major topics and numbers for subtopics ; for courses with lab hours only) Not applicable

Module I– Altered Oxygenation: Cardiovascular

- A. Advanced preparation of the critical care nurse, and role and functions of the critical care nurse
- B. Advanced cardiac patient assessment including hemodynamic monitoring
- C. Interpret EKG rhythms and differentiate among the lethal cardiac rhythms, and nursing implementations related to each, including code blue procedures
- D. Pathophysiology and apply the nursing process to complicated myocardial infarction (MI), cardiac valve stenosis/regurgitation, cardiogenic shock, cardiac tamponade, and disseminated intravascular coagulation (DIC)
- E. Identification and description of cardiac medications used in the critical care environment

Module II – Altered Oxygenation: Respiratory

- A. Differentiate between early and late clinical manifestations of Acute Respiratory Failure (ARDS)
- B. Collaborative care options for treating Acute Respiratory Failure (ARDS)
- C. The nursing and collaborative management of Acute Respiratory Failure (ARDS)

Module III– Alteration in Neurological Function

- A. Care of the client with a spinal cord injury

Module IV– Altered Senses: Pain

- A. Analyze critical nursing interventions for sedation, pain control for neuromuscular blockade, and continuous intravenous infusions for sedation
- B. Comparison and contrast of medically induced coma, and therapeutic paralysis
- C. Pain management of the burn patient

Module V– Altered Metabolic Function

- A. Care of the client with diabetic ketoacidosis
- B. Differentiate between hyperosmolar hyperglycemic nonketotic syndrome, and hypoglycemia
- C. Compare and analyze chronic and acute complications of diabetes mellitus
- D. Related changes for a gerontological client with diabetes mellitus

Module VI – Altered Fluid and Electrolytes: Burns

- A. Types, causative agents and burn classifications by depth and extent of injury
- B. Systemic pathophysiological effects of a major burn
- C. Nursing and collaborative management of the burn client during the emergent phase
- D. Nursing and collaborative management of the burn client during the acute phase
- E. Nursing and collaborative management of the burn client during the rehabilitative phase

Module VII– Altered Elimination: GI/Biliary/Hepatic

- A. Analyze specific principles of nursing care for the client with acute and end stage liver disease
- B. Liver transplantation and the collaborative management necessary for care
- C. Techniques of therapeutic communication to patients and families in crisis
- D. Ethical issues related to organ donation and end-of-life issues

Module VIII – Altered Elimination: Renal

- A. Acute and chronic renal failure/end stage renal disease (ESRD)
- B. General principles and types of dialysis
- C. Renal transplantation and the collaborative management necessary for care

Module IX – Altered Immunity

- A. Analyze the relationship between severe acute respiratory syndrome (SARS), and multi-system organ failure (MODS)
- B. Types of shock

Module X – Altered Conditions: Trauma-Overdose-Withdrawal/Abuse/Terrorism/Disaster

- A. Advanced patient assessment and triage
 - B. Pathophysiology and apply the nursing process to traumatic injury, chemical overdose, withdrawal, and abuse
 - C. Disaster planning and response to include bioterrorism
- Module XI– Leadership
- A. Role of the nurse leader in conflict management
 - B. Purposes and needs for nurse licensure, the significance of nurse practice acts, and implications of regulatory agencies
 - C. The decision making process
Employment issues that affect the new graduate nurses

9. Methods of Instruction (Use outline format with letters for differentiating methods ; list instructor initiated teaching and learning strategies)

- A. Lecture
- B. Videos
- C. High-fidelity simulation education
- D. Anatomical models

10. Out-of- Class Assignments (Use outline format with letters for differentiating assignments; examples include, but are not limited to, mandatory field trips, applied field work, etc.) Not applicable

- A. Case Studies
- B. Nursing care plans and /or concept mapping
- C. Preparatory assignments for clinical settings
- D. Reflection on specific clinical experiences

11. Methods of Assessment (Use outline format with letters for differentiating major topics and numbers for subtopics ; list measurements of student achievement, writing assignment, and/or proficiency demonstration)

- A. Exams
- B. Quizzes

12. Cultural Pluralism Assignments and Methodology (Describe specific instructor initiated examples examining aspects of culture, contributions and social experiences of underrepresented ethnic or racial groups in the U.S. or in the history and multicultural traditions of non-western societies; examples should be comparative among multiple social groups, and include analysis of concepts of ethnicity, ethnocentrism and racism, and how they shape and explain ethnic experience)

Cultural diversity is a thread that runs throughout this program. The student will be assigned patients based on diagnosis, which will include a variety of cultural, ethnic, and socioeconomic backgrounds.

13. Critical Thinking Assignments (Use detail and state in cognitive terms reasonable, reflective thinking that focuses on observational skills, self-awareness, reasoning skills, questioning skills, problem-solving skills, and presenting one’s position on an issue or solution)

Appropriate interventions will be required upon abnormal assessment finding. The student will have to learn to organize, delegate, and prioritize when performing the patients’ care. Nursing care plans will be comprehensive and require critical thinking.

LEARNING RESOURCES STATEMENT (use for all courses)

The Learning Resources collection has been reviewed by the faculty originator and the librarian.

The following resources are ADA compliant and currently available for course support:

- Books
- Reference Materials
- Media
- Electronic Resources

The following resources are recommended for purchase to further support the course:

- Books
- Reference Materials
- Media
- Electronic Resources

Include an itemized list of materials requested including source, title, ISBN, and/or other purchase information:

Click here to enter text.

TEXTBOOK FORM (use for all courses)

All transfer-level courses are required 1) to have a primary text with a 12th grade or higher readability and 2) be no more than five years old. Exceptions will be subject to Curriculum Committee approval. Secondary textbooks and other instructional materials are not restricted to specific readability levels or publication dates. All textbooks must have readability statistics attached.

REQUIRED PRIMARY STUDENT TEXTBOOK(S) / MATERIAL(S)

Title: Medical-Surgical Nursing: Assessment & Management of Clinical Problems
Edition, Publication Year: **8th ed. , 2011** ISBN/Website: 978-0-323-06580-1
Author(s) Last Name, First Name: Lewis, S.M.; Dirksen,S.R.; Heitkemper, M.M.; Bucher,L.; Camera, I,M.
Publisher: Mosby/Elsevier
Readability Level: 14.8

Title: Priorities in Critical Care Nursing
Edition, Publication Year: 6th ed, 2012 ISBN/Website: 978-0-323-07461-2
Author(s) Last Name, First Name: Urden, L.D., Stacy, K.M., Lough, M.E.
Publisher: Elsevier/Mosby
Readability Level: 15.8

SECONDARY STUDENT TEXTBOOK / MATERIAL

Title: Study Guide to Medical Surgical Nursing
Edition, Publication Year: 8th, 2011 ISBN/Website: 978-0-323-06654-9
Author(s) Last Name, First Name: Lewis,S.M.; Dirksen, S.R.; Heitkemper, M.M.; Bucher, L.; Camera, I.M
Publisher: Mosby/Elsevier
Readability Level: 14.8

OPTIONAL INSTRUCTOR RESOURCE MATERIAL

Title: [Click here to enter text.](#)
Edition, Publication Year: [Click here to enter text.](#) ISBN/Website: [Click here to enter text.](#)
Author(s) Last Name, First Name: [Click here to enter text.](#)
Publisher: [Click here to enter text.](#)
Readability Level: [Click here to enter text.](#)

Medical Surgical Nursing: Assessment & Management of Clinical Problems; 8th edition, c. 2011

Authors: Lewis, Dirksen, Heitkemper, Bucher, and Camera

Excerpts from Text to determine readability level:

Chapter 1: pg 6 Contemporary Nursing Practice: "Evidence-based practice is the consistent use of the best evidence (i.e., research findings, data from quality improvement and practice management initiatives, professional organization standards) in combination with clinician expertise and patient preferences and values to support clinical decision making. Expectations for high-quality, cost-effective care and the increased accessibility of health information have contributed to a need for all health disciplines to provide care based on the best evidence. Regulatory and accrediting agencies (e.g. TJC) now require documentation of the effective use of evidence in clinical care decisions. EBP encompasses the appraisal, integration, and evaluation of both external evidence (i.e., generalizable research studies) and internal evidence (i.e., unit quality improvement data). When there is little or no credible evidence or when evidence is inconsistent, health care providers can partner with researchers to conduct research and generate knowledge that identifies best patient care practices."

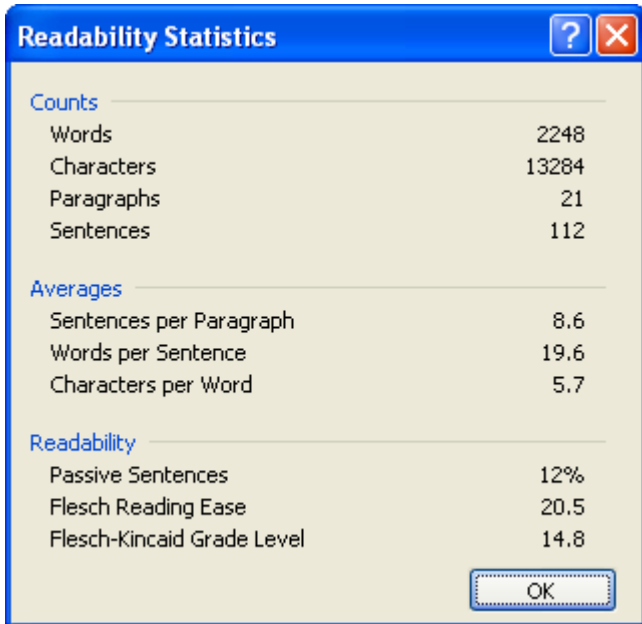
Ch. 10, pg 130- Pain: Dorsal Horn Processing: "Once a nociceptive signal arrives in the CNS, it is processed within the dorsal horn of the spinal cord. Neurotransmitters released from the afferent fiber bind to receptors on nearby cell bodies and dendrites of cells. Some of these neurotransmitters produce activation (e.g., glutamate, aspartate, substance P), whereas others inhibit activation of nearby cells (e.g., gamma-aminobutyric acid [GABA], serotonin, norepinephrine). In this area, exogenous and endogenous opioids also play an important role by binding to opioid receptors and blocking the release of neurotransmitters, particularly substance P. Endogenous opioids, which include enkephalin and β -endorphin, are chemicals that are synthesized and secreted by the body. They are capable of producing analgesic effects similar to those of exogenous opioids such as morphine.

When enhanced excitability occurs in spinal neurons, it is termed central sensitization. Peripheral tissue damage or nerve injury can cause central sensitization, and continued nociceptive input from the periphery is necessary to maintain it. Central sensitization plays a crucial role in the pathogenesis of chronic pain. It is defined by an increase in the excitability of neurons within the CNS, so that normal sensory inputs cause abnormal sensing and responses to painful and other stimuli. This explains why some persons experience significant pain from touch or tactile stimulation in and around the areas of tissue or nerve injury. With central sensitization, the central processing circuits are disrupted. Some aspects of central sensitization can persist after peripheral inputs cease; however, peripheral and central neural mechanisms involved in causing central sensitization can be long lasting."

Ch. 28, pg 569 Lower Respiratory Problems: "Flail chest results from the fracture of two or more ribs, in two or more separate locations, causing an unstable segment. The flail segment usually involves the anterior (sternal separation) or lateral rib fractures. The chest wall cannot provide the structural support necessary to maintain bellows action and ventilation. The affected (flail) area will move paradoxically with respect to the intact portion of the chest during respiration. During inspiration, the affected portion is sucked in, and prevents adequate ventilation of the lung in the injured area and increases the work of breathing. The underlying lung may have a pulmonary contusion aggravating hypoxemia. A flail chest is usually apparent on visual examination of the unconscious patient. The patient manifests rapid, shallow respirations and tachycardia. A flail chest may not be initially apparent in the conscious patient as a result of splinting of the chest wall. The patient moves air poorly and movement of the thorax is asymmetric and uncoordinated. Palpation of abnormal respiratory movements, evaluation for crepitus near the rib fractures, chest x-ray, and ABGs all assist in the diagnosis."

Chapter 67: Shock, SIRS, and MODs, pg 1739: "When the inflammatory response is not controlled, consequences occur. These include activation of inflammatory cells and release of mediators, direct damage to the endothelium, and hypermetabolism. Vasodilation becomes excessive and leads to decreased SVR and hypotension. In addition, there is also an increase in vascular permeability. This allows mediators and protein to leak out of the endothelium and into the interstitial space. White blood cells begin to digest the foreign debris, and the coagulation cascade is activated. Hypotension, decreased perfusion, microemboli, and redistributed or shunted

blood flow eventually compromise organ perfusion..... The endothelial damage from the release of inflammatory mediators causes increased capillary permeability. This facilitates movement of fluid from the pulmonary vasculature into the pulmonary interstitial spaces. The fluid then moves to the alveoli, causing alveolar edema. Type I pneumocytes (alveolar cells) are destroyed. Type II pneumocytes become dysfunctional, and surfactant production is decreased. The alveoli collapse, creating an increase in shunt (blood flow to the lungs that does not participate in gas exchange) and worsening ventilation-perfusion mismatch. The end result is ARDS. Patients with ARDS need aggressive management with mechanical ventilation.”



Readability Statistics	
Counts	
Words	2248
Characters	13284
Paragraphs	21
Sentences	112
Averages	
Sentences per Paragraph	8.6
Words per Sentence	19.6
Characters per Word	5.7
Readability	
Passive Sentences	12%
Flesch Reading Ease	20.5
Flesch-Kincaid Grade Level	14.8

Text: Priorities in Critical Care Nursing; Urden, L.D., Stacy, K.M., Lough, M.E.; C. 2012, 6th edition, Elsevier Mosby.

Excerpts from text to determine readability:

Ethical and Legal Issues (Ch. 2, pg. 8): Moral distress is a serious problem for nurses. It occurs when one knows the ethically appropriate action to take, but cannot act upon it. It also presents when one acts in a manner contrary to personal and professional values. There can be an internal conflict when one’s ethical framework clashes with the ethical beliefs of the patient. As a result, there can be significant emotional and physical stress that leads to feelings of loss of personal integrity and dissatisfaction with the work environment. Relationships with both co-workers and patients are affected and can negatively impact the quality of care. There is also a great impact on personal relationships and family life. It is therefore important that nurses recognize moral distress and actively seek strategies to address the issue through institutional, personal, and professional organizational resources. Knowledge and application of ethical principles and guidelines will assist the nurse in daily practice when ethical dilemmas occur. The American Association of Critical-Care Nurses (AACN) has written a position statement on moral distress that describes the phenomenon and lists actions for individual nurses and employers to address moral distress.

ch. 15, pg. 289: Acute lung injury (ALI) is a systemic process that is considered to be the pulmonary manifestation of multiple organ failure dysfunction syndrome. It is characterized by noncardiac pulmonary edema and disruption of the alveolar-capillary membrane as a result of injury to either the pulmonary vasculature or the airways.

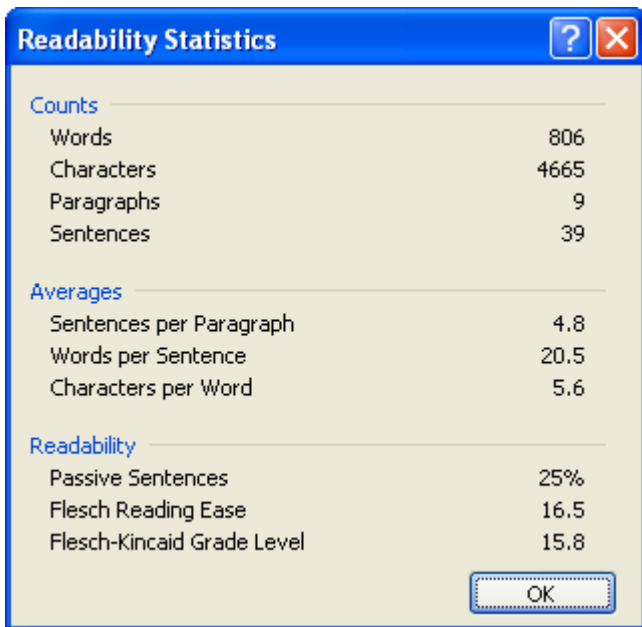
The severest form of ALI is called acute (formerly called “adult”) respiratory distress syndrome (ARDS). ARDS is identified by the same diagnostic criteria as ALI except that the ratio of the PaO₂ to FiO₂ is less than or equal to 200 mm Hg. As the etiology, pathophysiology, and treatment of ALI is the same as for ARDS, the discussion will use the broader term of ALI.

The progression of ALI can be described in three phases: exudative, fibroproliferative, and resolution. ALI is initiated with stimulation of the inflammatory-immune system as a result of a direct or indirect injury. Inflammatory mediators are released from the site of injury, resulting in the activation and accumulation of the neutrophils, macrophages, and platelets in the pulmonary capillaries. These cellular mediators initiate the release of humoral mediators that cause damage to the alveolar-capillary membrane.

Within the first 72 hours after the initial insult, the exudative phase or acute phase ensues. Once released, the mediators cause injury to the pulmonary capillaries, resulting in increased capillary membrane permeability leading to the leakage of fluid filled with protein, blood cells, fibrin, and activated cellular and humoral mediators into the pulmonary interstitium. Damage to the pulmonary capillaries also causes the development of microthrombi and elevation of pulmonary artery pressures. As fluid enters the pulmonary interstitium, the lymphatics are overwhelmed and unable to drain all the accumulating fluid, resulting in the development of interstitial edema. Fluid is then forced from the interstitial space into the alveoli, resulting in alveolar edema. Pulmonary interstitial edema also causes compression of the alveoli and small airways. Alveolar edema causes swelling of the type I alveolar epithelial cells and flooding of the alveoli.

Ch. 26: Shock, pg. 541: Shock is a complex pathophysiological process that often results in multiple organ dysfunction syndrome (MODS) and death. All types of shock eventually result in ineffective tissue perfusion and acute circulatory failure. The shock syndrome is a pathway involving a variety of pathological processes that may be categorized as four stages: initial, compensatory, progressive, and refractory. Progression through each stage varies with the patient’s prior condition, duration of the initiating event, response to therapy, and correction of underlying cause.

Pathophysiology: During the initial stage, cardiac output (CO) is decreased, and tissue perfusion is threatened. Almost immediately, the compensatory stage begins as the body’s homeostatic mechanisms attempt to maintain CO, blood pressure, and tissue perfusion. The compensatory mechanisms are mediated by the sympathetic nervous system (SNS) and consist of neural, hormonal, and chemical responses. The neural response includes an increase in heart rate and contractility, arterial and venous vasoconstriction, and shunting of blood to the vital organs. Hormonal compensation includes activation of the renin response and stimulation of the anterior pituitary and adrenal medulla. Activation of the renin response results in the production of angiotensin II, which causes vasoconstriction and the release of aldosterone and antidiuretic hormone (ADH), leading to sodium and water retention. Stimulation of the anterior pituitary results in the secretion of adrenocorticotrophic hormone (ACTH), which stimulates the adrenal cortex to produce glucocorticoids, causing a rise in blood glucose levels. Stimulation of the adrenal medulla causes the release of norepinephrine and epinephrine, which further enhance the compensatory mechanism.



The image shows a software dialog box titled "Readability Statistics". It contains three sections: "Counts", "Averages", and "Readability". Each section lists a metric and its corresponding value. At the bottom right, there is an "OK" button.

Counts	
Words	806
Characters	4665
Paragraphs	9
Sentences	39

Averages	
Sentences per Paragraph	4.8
Words per Sentence	20.5
Characters per Word	5.6

Readability	
Passive Sentences	25%
Flesch Reading Ease	16.5
Flesch-Kincaid Grade Level	15.8

OK

Health and Wellness Learning Area Meeting

West Hills College Lemoore

September 6, 2011

Room 238

12:00 p.m. – 1:00 p.m.

10) Curriculum Committee Report

L. Catron reported that RN & LVN curriculum is up for review and that new curriculum forms will be available in October. L. Catron also informed the learning area that she is working on the grid for the 5 year review. R. Ragsdale reported that the state has been evaluating various courses in the PE areas and he is working with M. Hendrickson to adjust the pre-requisites for basketball and bad mitten curriculum. He is also trying to finish volleyball curriculum so that the course can be offered in the spring.

Health and Wellness Learning Area Meeting

West Hills College Lemoore

September 27, 2011

Room 238

12:00 p.m. – 1:00 p.m.

7) Curriculum Committee Report – Leslie

L. Catron reported Curriculum had their first meeting and that the committee underwent training. Training is necessary if you are in need of a substitute to fill in for a curriculum meeting. She reported that the training is located on the curriculum portal.

L. Catron also reported that all new forms should be ready in two weeks. J. Preston encouraged the learning area if the deadline has passed you can still submit the forms.

Health and Wellness Learning Area Meeting

West Hills College Lemoore

November 8, 2011

Room 239

12:00 p.m. – 1:00 p.m.

8) Curriculum Committee Report – Leslie:

L. Catron reported that the curriculum forms went through the second reading and should be up later in the week to use. She noted that the curriculum packet forms will have a few changes and that the short form will no longer be used. If writing or revising curriculum; use the new forms.

10.1- Course Deactivations/Deletions- Rodney:

R. Ragsdale asked the faculty to check their e-mails regarding information he sent of deactivating courses such as PE 6 & PE 52 while keeping courses PE 46 & PE 48 active.

10.2- TMC Kinesiology:

R. Ragsdale handed out a Kinesiology Transfer Model Curriculum form and shared with the learning area that the state passed the KINES degree. He will work with M. Hendrickson to help check over courses for a two option degree and pass the report on to Coalinga.

Health and Wellness Learning Area Meeting
West Hills College Lemoore
February 7, 2012
Room 239
12:00 p.m. – 1:00 p.m.

9) Curriculum Committee Report – Leslie:
10.1- Course Revisions for Spring 2012?

L. Catron reminded the learning area to submit any forms they may have for TRC. She noted that Nursing and PE have turned in paperwork using the new curriculum forms.

S. Droker reminded the learning area to visit the WHCL Curriculum Team Site to view the curriculum schedule. L. Catron added that the Curriculum handbook is also available on the portal.

Health and Wellness Learning Area Meeting
West Hills College Lemoore

April 10, 2012
Room 239
12:00 p.m. – 1:00 p.m.

10) Curriculum Committee Report – Leslie:

L. Catron noted that the Paramedic program curriculum has been completed by Marleen Smart and submitted to TRC for review. She requested input as others would seem appropriate.

TRC will review all nursing, PE, and Paramedic courses on April 16, 2012. The final forms with corrections are due to be posted to Curriculum Committee by Monday April 23, 2012 before 1 p.m. ensuring review in this semester.