

# **Basic Critical Care Nursing Advanced Certificate program**



Candidate Guide

## Copyright

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Saskatchewan Institute of Applied Science and Technology – June 2005

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The Basic Critical Care Nursing Advanced Certificate program is dedicated to removing barriers and broadening the access to programs at SIAST. We believe that adults acquire knowledge and skills through life and work experience that may align with courses within our programs.

<b>Developed by program</b>				
<b>Revised</b>	April 2008	August 2009	June 2011	
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## **Why consider a PLAR assessment?**

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PLAR refers to the combination of flexible ways of evaluating people's lifelong learning, both formal and informal against a set of established standards. You can receive academic credit for your relevant lifelong learning. The Basic Critical Care Nursing program recognizes prior learning in a number of ways.

We recognize:

- Previous formal learning from an accredited training institution through transfer of credit.
- Previous informal learning or experiential learning through a comprehensive prior learning and recognition process.

## **What are the PLAR options?**

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To be eligible for PLAR, an applicant must first register or already be registered as a SIAST student.

### **Program level certification – Full program challenge**

Eligibility criteria:

- 3 years (the equivalent of 5000 hours) recent, successful nursing experience in the critical care field as a registered nurse;
- current immunization; and
- valid CPR Health Care Provider/ AED Level "C" certificate

### **Fees:**

- For a listing of the specific PLAR fees, check the [PLAR database](#) or call SIAST and ask to speak to the PLAR advisor/counsellor assigned to the Basic Critical Care Nursing program at: 1-866-467-4278 or 1-866-goSIAST.
- For students sponsored by a health region, please contact the BCCN Program at (306) 775-7575.

## **How many courses can be challenged through PLAR in the Basic Critical Care Nursing program?**

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The Basic Critical Care Nursing Program can only be challenged at the program level. The program challenge includes both theory and clinical. The next section of this guide includes a table with a listing of the individual courses which comprise the total program challenge.

## Which courses are PLAR-ready?

Basic Critical Care Nursing Total program challenge profile			
COURSE CODE	COURSE NAME	PLAR Challenge(s) available through program	PLAR Challenge(s) not available
<b>Cardiovascular block</b>			
NRSG 227	Cardiovascular System & Associated Diseases	✓	
NRSG 228	ECG Interpretation	✓	
NRSG 229	Cardiovascular Hemodynamics & Pharmacology	✓	
<b>Respiratory and Neurological block</b>			
NRSG 230	Critical Care Challenges 1	✓	
NRSG 231	Critical Care Challenges 2	✓	
<b>Critical Care challenge</b>			
NRSG 232	Critical Care Challenges 3	✓	
<b>Clinical component</b>			
CLIN 212	Clinical Practice 3	✓	

For assistance call SIAST and ask to speak to the BCCN Program advisor Trina Hill at: 1 866-467 4278 or 1-866-goSIAST, Extension: 775-7577.

## Is PLAR available at any time of the year?

Candidates can apply for PLAR at any time between September and March. The deadline for applying for PLAR is March 31st. Program PLAR must be completed in a 5 week time frame.

## Is it *easier* to challenge a course through PLAR - OR - take the course?

Neither is easier. By using PLAR you may reduce the repetition of studying information that you already know. The PLAR process allows you to demonstrate knowledge you already have.

PLAR is not an easy way to certification, rather a "different" way to obtain certification. Your personal level of skill and experience will dictate which courses you choose to challenge. The self-audit section found later in this guide will help you decide if you have a good match of skill and knowledge for a specific course.

## Methods of assessing prior learning

### I. General guidelines for the theory component exams and ECG assignment

- Writing and passing on one attempt with a score of at least 60% on each of the **3 multiple choice exams**.
- Completing and passing on one attempt of an ECG assignment.
- Online exams are provided for candidates at designated test sites. An exam proctor will enter a password in order to grant a candidate access to the PLAR exam.
- Hard copy exams are provided for candidates at designated test sites if online access is unavailable. Exam proctors will be provided with an answer key and will notify the SIAST BCCN program assessor of the results.
- The program assessor will notify the candidate of the exam results.
- Changes to grades achieved on the exams will only be done in consultation with the program assessor.
- Exam proctors will not make changes to grades.
- Failure to achieve 60% will result in consultation with faculty and program head to determine next steps.

### II. Assessment methods

#### 1. ECG Assignment:

- The ECG assignment is located within the NRSG 228 *ECG Interpretation* coursepack.
- The ECG assignment must be completed prior to writing Exam #2 – PLAR Respiratory and Neurological Exam.
- 10% of the final grade for Exam #1 will be allocated from the ECG assignment. In order to pass, candidates must obtain a score of at least 90%.
- Failure to obtain a score of at least 90% will result in the candidate having to enrol in the full Basic Critical Care Nursing program in order to achieve the advanced certificate.
- The completed ECG assignment can be mailed or faxed to the program assessor:

Faculty  
 Basic Critical Care Nursing program  
 SIAST Wascana Campus  
 4500 Wascana Parkway, Box 556  
 Regina, SK S4P 3A3  
 FAX: (306) 798-2027

#### 2. Exam #1 – PLAR Cardiovascular exam (150 multiple choice questions)

- NRSG 227      Cardiovascular system and associated diseases
- NRSG 228      ECG Interpretation
- NRSG 229      Cardiovascular hemodynamics and pharmacology

#### 3. Exam #2 – PLAR Respiratory and Neurological Exam

(150 multiple choice questions)

- NRSG 230      Critical Care Challenges 1
- NRSG 231      Critical Care Challenges 2

4. **Exam #3 – PLAR Critical Care Challenges exam** (100 multiple choice questions)
- NRSG 232 Critical Care Challenges 3

**NOTE:** The candidate must successfully complete the ECG assignment and all theory component exams in the above order prior to proceeding to CLIN 212 Clinical Practice 3.

5. **Clinical component**

- Credit for CLIN 212 Clinical Practice 3 is obtained by successful completion of five 12-hour clinical shifts, including submission of a Daily Patient Assessment and Clinical Performance Evaluation form for each of the 5 clinical shifts. It also includes submission of a Clinical Log and the Skills Checklist. The overall clinical grade is pass/fail.
- The Clinical Performance Evaluation can be completed by the candidate's clinical educator, charge nurse or manager.
- The Clinical Evaluation rubric is located on the Clinical Performance Evaluation form.
- It is the candidate's responsibility to schedule the five 12-hour clinical shifts within the established PLAR timelines.
- **Clinical Skills Checklist:**
  - Must be submitted prior to the completion of the five 12-hour clinical shifts.
  - The candidate's clinical educator, charge nurse or nurse manager can complete the Clinical Skills Checklist by dating and signing each skills component listed.
  - There will be no opportunity to review and/or re-demonstrate a skill if not signed off.
- **One Clinical Log:**
  - Must be submitted prior to completion of the five 12-hour clinical shifts.
  - The candidate requires a passing grade of 60%.
  - Assignment expectations are included with the Clinical Log template. (Appendix C)
- The completed Skills Checklist and Clinical Log are mailed or faxed to the program assessor:

Faculty  
Basic Critical Care Nursing program  
Nursing Division  
SIAST Wascana Campus  
4500 Wascana Parkway, Box 556  
Regina SK S4P 3A3  
FAX: (306) 798-2027

**NOTE:** Failure to successfully achieve the clinical requirements will result in consultation with faculty and program head to determine next steps.

## **If I live out of town, do I have to travel to a main campus to do PLAR?**

There may be a time that you will need to meet on campus with the program assessor; however communication with the assessor will mainly occur via email or telephone. It is the candidate's responsibility to incur the cost of accommodation or travel. The clinical component of the PLAR challenge takes place in pre-approved agencies (critical care areas) within the Regina Qu'Appelle or Saskatoon health regions.

## **What if I have a disability & need equity accommodations?**

At SIAST, we understand that sometimes services must be provided to students in a variety of ways to achieve the goals of fair representation. Therefore, the range of services provided for Education Equity students is as diverse as the needs of those students. We strive for equity (not uniformity) and provide varied services for students with differing needs. If more information is required, please contact a SIAST counsellor at a campus closest to you or refer to the SIAST Web site: [http://www.siastr.sk.ca/stuservices/advising\\_counselling.shtml](http://www.siastr.sk.ca/stuservices/advising_counselling.shtml)

## **Are there other methods to gain SIAST course credits for prior learning?**

### **Transfer Credit**

Yes, SIAST will grant credit for previous training that is similar in content, objectives, and evaluation standards to SIAST training. Transfer of credit is different from the PLAR process. Transfer Credit guidelines may be found at: [http://www.siastr.sk.ca/stuservices/plar/transfer\\_credit.shtml](http://www.siastr.sk.ca/stuservices/plar/transfer_credit.shtml)

It is the student's responsibility to check with [Registration Services](#) for specific campus procedures on this policy. For specific information and guidelines regarding transfer of credit, contact a [SIAST educational counsellor](#).

**An online provincial transfer credit guide is now available at [www.saskcat.ca](http://www.saskcat.ca)**

**Note:** *If you are a recent high school graduate, check the Saskatchewan Learning Web site for any articulated agreements that may apply for Computer Courses or Practical and Applied Arts Courses.*

[SaskLearning Credit Transfer Guide](#)

[SaskLearning website](#)

### **Equivalency Credit**

Equivalency credit refers to the application of credit you may have earned in a previously taken SIAST course to your current SIAST course. Apply at registration services for *equivalency credit*. This process should also be completed prior to your PLAR challenge. If these credits cannot be used for *equivalency credit*, you may use these accredited courses as part of your evidence for your PLAR challenge.

## Contact us

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If more information is required, please contact a designated PLAR counsellor at a campus closest to you.

### **Kelsey Campus, Saskatoon, SK**

1-866-goSIAST or 1-866-467-4278

### **Palliser Campus, Moose Jaw, SK**

1-866-goSIAST or 1-866-467-4278

### **Wascana Campus, Regina, SK**

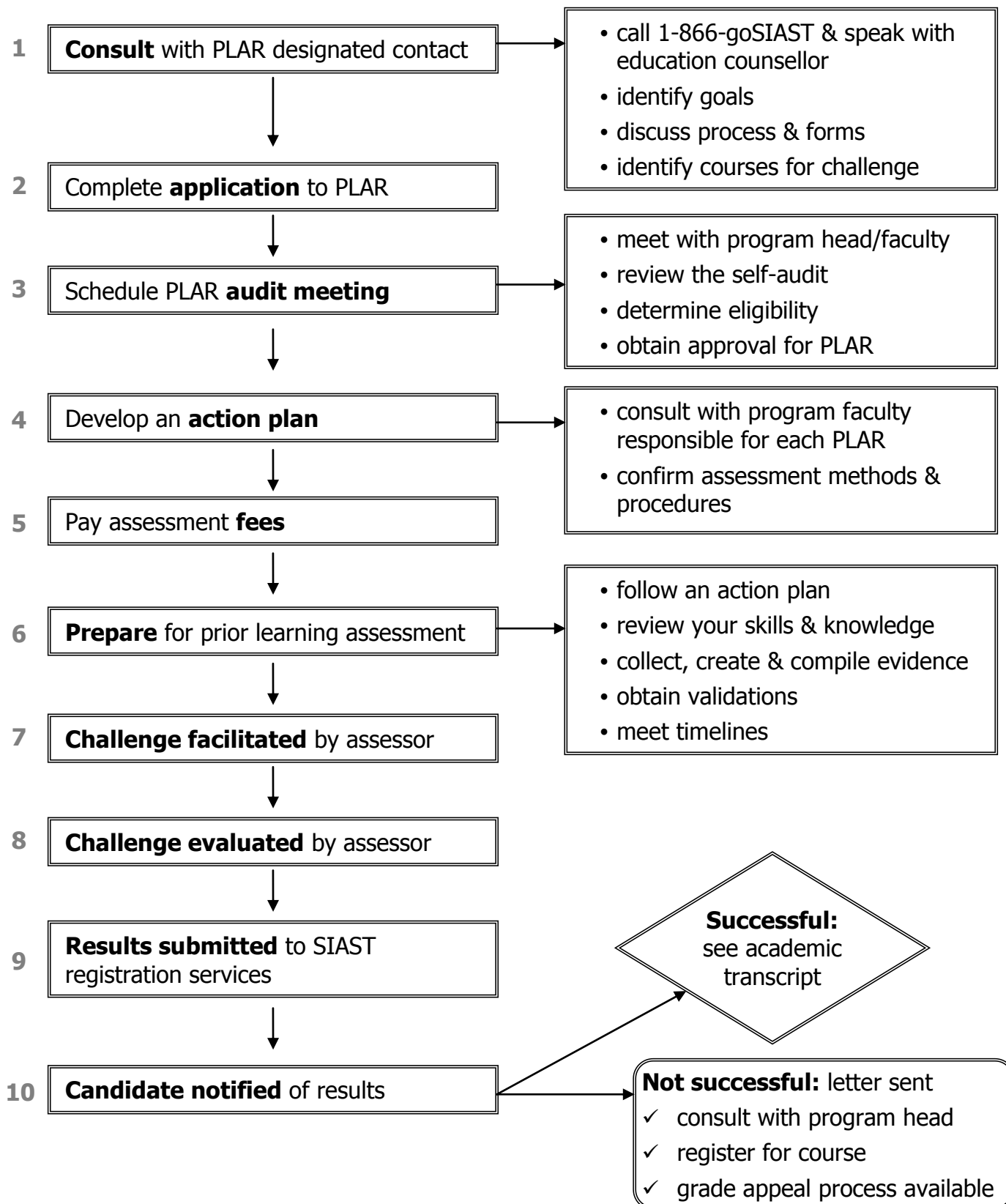
1-866-goSIAST or 1-866-467-4278

### **Woodland Campus, Prince Albert, SK**

1-866-goSIAST or 1-866-467-4278

For specific PLAR program information, please call SIAST and speak to the BCCN program advisor at: 1-866-467-4278, Extension: 775-7577.

## Prior Learning Assessment and Recognition process



## **Guiding principles for developing a PLAR evidence file**

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1. As you begin the PLAR process you will be advised if any evidence is required. This will be identified in your [action plan](#). Check with the PLAR designated contact **before** you begin to gather evidence.
2. Evidence must be valid and relevant. Your evidence must match the learning outcomes identified for each course.
  - It is your responsibility to create, collect and compile relevant evidence – if required.
3. Learning must be current – 3 years (the equivalent of 5000 hours) recent successful nursing experience in the critical care field as a registered nurse.
4. The evidence should demonstrate the skills and knowledge from your experiences.
5. The learning must have both a theoretical and practical component.

## **Types of evidence**

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There are three types of evidence used to support your PLAR request:

1. Direct evidence – what you can demonstrate for yourself.
2. Indirect evidence – what others say or observe about you.
3. Self-evidence – what you say about your knowledge and experience.

Ensure that you provide full evidence to your Basic Critical Care Nursing program faculty assessor so that your prior learning application is assessed appropriately. Well organized, easy to track evidence will also ensure that none of the evidence is missed or assessed incorrectly.

Here are some examples of evidence that you may be requested to submit as part of your evidence file (if required):

- Proof of 3 years (5000 hours) recent critical care nursing experience as a registered nurse
- Current CPR Health Care Provider/AED Level “C” certificate

Successful completion and submission of:

- Self-audit
- Exams 1, 2 & 3
- ECG Assignment
- Clinical shifts 1 – 5 including:
  - Daily Patient Assessment and Clinical Performance Evaluation forms at the end of each clinical shift
  - Clinical Skills Checklist
  - One clinical log

All documents that are submitted to SIAST may be returned to the student after the final results have been given and the grade appeal deadline of seven days has passed. A copy of transcripts and certificates may be included in your evidence file, but be prepared to show original documents at the PLAR audit meeting for validation.

### **How long will it take to prepare evidence for PLAR?**

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Since the requirements are different for each course, and each candidate has different experiences, the amount of time it takes to prepare your evidence will vary.

### **Steps to complete a self-audit**

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1. Read through the levels of competence as listed below.

<b>Mastery:</b>	I am able to demonstrate the learning outcome well enough to teach it to someone else.
<b>Competent:</b>	I can work independently to apply the learning outcome.
<b>Functional:</b>	I need some assistance in using the outcome.
<b>Learning:</b>	I am developing skills and knowledge for this area.
<b>None:</b>	I have no experience with the outcome.

#### **Learning outcomes**

For each learning outcome listed, please self-evaluate your competency levels and record in the appropriate column for each self-audit.

2. Take a few minutes and read through the following self-audit for each course you are interested in as a PLAR candidate.
3. Check your level of competence as you read through each of the learning outcomes for each course. The information will help you in your decision to continue with your PLAR application.
4. In order to be successful in a PLAR assessment, your abilities must be at the competent or mastery level for the majority of the learning outcomes. Some things to consider when determining your level of competence are:
  - How do I currently use this outcome?
  - What previous training have I had in this outcome: workshops, courses, on-the-job?
  - What personal development or volunteer experience do I have in this area?

Be prepared to explain the reason you chose this level if asked by an assessor.

5. Bring the completed self-audit to a consultation meeting with the program head or faculty member in [step 3 – PLAR process](#) of the candidate process for prior learning assessment.

## Self-audit guide(s)

### NRSG 227 – Cardiovascular System & Associated Diseases

You will build on the foundations of cardiovascular nursing by reviewing the anatomy and physiology of the cardiovascular system. You will examine and plan for management of common cardiovascular diseases.

**Credit unit(s):** 1.0

**Note:** NRSG 227, 228 & 229 are assessed as a block. The PLAR assessment methods and resources can be found following the self-audit for NRSG 229.

<b>NRSG 227 – Cardiovascular System &amp; Associated Diseases</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Review the anatomy & physiology of the cardiovascular system.					
▪ Review the anatomy of the heart					
▪ Review the structure of the coronary arteries and blood flow					
▪ Review cardiac performance					
2. Plan for implementation of assessment of the cardiovascular system.					
▪ Review the pertinent cardiovascular components of a nursing history					
▪ Review the inspection and palpation techniques for physical examination of the cardiovascular system					
▪ Review auscultation of the cardiovascular system					
▪ Discuss the diagnostic tests used in assessing the cardiovascular system					
▪ Interpret diagnostic data					
▪ Plan for implementation of assessment of the cardiovascular system					
3. Plan for management of common cardiovascular diseases.					
▪ Discuss cardiovascular infection and inflammatory diseases and their clinical management					
▪ Discuss cardiomyopathies and their clinical management					
▪ Discuss peripheral vascular disease and its clinical management					
▪ Discuss aortic aneurysm and aortic dissection and their clinical management					
▪ Discuss hypertensive crisis and describe its clinical management					

<b>NRSG 227 – Cardiovascular System &amp; Associated Diseases</b>		<b>Mastery</b>	<b>Competent</b>	<b>Functional</b>	<b>Learning</b>	<b>None</b>
<b>Mastery:</b>	I am able to demonstrate it well enough to teach it to someone else.					
<b>Competent:</b>	I can work independently to apply the outcome.					
<b>Functional:</b>	I need some assistance in using the outcome.					
<b>Learning:</b>	I am developing skills and knowledge for this area.					
<b>None:</b>	I have no experience with the outcome.					
<ul style="list-style-type: none"> <li>▪ Discuss heart failure and its clinical management</li> </ul>						
<ul style="list-style-type: none"> <li>▪ Discuss acute coronary syndromes and their clinical management</li> </ul>						
<ul style="list-style-type: none"> <li>▪ Discuss valvular heart disease and its clinical management</li> </ul>						
<ul style="list-style-type: none"> <li>▪ Plan for management of common cardiovascular diseases</li> </ul>						

## NRS228 – ECG Interpretation

You will focus on a systematic approach to cardiac rhythm interpretation. The course content includes identifying, analyzing, and treating cardiac rhythms. You will also receive a brief introduction to 12 Lead Electrocardiography interpretation,

**Credit unit(s):** 2.0

<b>NRS228 – ECG Interpretation</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Describe principles of electrocardiography.					
▪ Describe equipment required for obtaining electrocardiography (ECG)					
▪ Describe characteristics of ECG graph paper					
▪ Identify the normal waveforms, intervals, segments and complexes produced by the heart's electrical events					
▪ Describe the steps in analyzing a rhythm strip					
2. Analyze cardiac rhythms.					
▪ Discuss sinus arrhythmias					
▪ Discuss atrial arrhythmias					
▪ Discuss junctional arrhythmias and atrioventricular blocks					
▪ Discuss supraventricular rhythms					
▪ Discuss ventricular arrhythmias					
▪ Discuss paced rhythms					
▪ Analyze cardiac rhythms					
3. Recognize basic principles of 12 Lead ECG Interpretation.					
▪ Recognize basic principles of 12 Lead ECG interpretation					
▪ Identify components of a normal 12 Lead ECG					
▪ Identify correct lead placement for obtaining a 12 lead ECG					
▪ Review the coronary arteries and the structures of the heart each supply					
▪ Discuss the different views of the heart as seen by the 12 Lead ECG					
▪ Relate corresponding leads on 12 Lead ECG for the following walls: inferior, anterior, lateral, septal, and posterior					
▪ Describe the difference between a 12 Lead and a 15 Lead ECG					
▪ Interpret a 12 Lead ECG					

<b>NRSG 228 – ECG Interpretation</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
4. Plan for management of a patient receiving cardiovascular electrotherapy.					
▪ Discuss defibrillation					
▪ Discuss cardioversion					
▪ Discuss cardiac pacemakers					
▪ Plan for management of a patient receiving cardiovascular electrotherapy					

## NRSG 229 – Cardiovascular Hemodynamics and Pharmacology

You will receive an introduction to the principles of hemodynamic monitoring and cardiovascular pharmacological therapy. Using these principles and therapies, you will plan for care of the critically ill patient.

**Credit unit(s):** 2.0

<b>NRSG 229 – Cardiovascular Hemodynamics and Pharmacology</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Describe the principles of hemodynamic monitoring.					
▪ Describe the principles of hemodynamic monitoring					
▪ Describe arterial pressure monitoring					
▪ Describe central venous pressure (CVP) monitoring					
▪ Describe pulmonary artery pressure monitoring					
2. Analyze hemodynamic monitoring results.					
▪ Describe cardiac output measurement					
▪ Analyze a hemodynamic profile					
3. Differentiate between the various pharmacological agents and their effect on the cardiovascular system.					
▪ Describe the use of fibrinolytics, anticoagulants and platelet inhibitor medications					
▪ Describe the common antiarrhythmic medications					
▪ Describe common vasoactive medications (vasodilators and vasopressors)					
▪ Describe the use of medications to increase cardiac contractile strength (inotropes)					
▪ Describe the use of diuretics in cardiovascular disease					
▪ Describe the pharmacological management of hyperlipidemia					
▪ Differentiate between the various pharmacological agents and their clinical indications					
4. Plan for management of critical ill patients.					
▪ Review the different types of shock					
▪ Describe the common pathophysiological process involved in shock					
▪ Discuss the different types of shock and their impact on the cardiovascular system					

<b>NRSG 229 – Cardiovascular Hemodynamics and Pharmacology</b>		<b>Mastery</b>	<b>Competent</b>	<b>Functional</b>	<b>Learning</b>	<b>None</b>
<b>Mastery:</b>	I am able to demonstrate it well enough to teach it to someone else.					
<b>Competent:</b>	I can work independently to apply the outcome.					
<b>Functional:</b>	I need some assistance in using the outcome.					
<b>Learning:</b>	I am developing skills and knowledge for this area.					
<b>None:</b>	I have no experience with the outcome.					
<ul style="list-style-type: none"> <li>Discuss the clinical management of shock</li> </ul>						
<ul style="list-style-type: none"> <li>Plan for management of a critically ill patient</li> </ul>						

## PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

### 1. Challenge exam #1

PLAR Cardiovascular exam (NRSG 227, NRSG 228, NRSG 229)

- 150 multiple choice questions
- Writing and passing on one attempt with a grade of at least 60%

### 2. ECG assignment

In order to pass, candidates must obtain a score of at least 90% on one attempt of the ECG assignment. The ECG assignment must be completed prior to writing Exam #2 – PLAR Respiratory and Neurological exam.

## Resources

Morton, P., Fontaine, D.K., Hudak, C., & Gallo, B.M. (2009). *Critical Care Nursing: A holistic approach*. (9<sup>th</sup> Ed.). Philadelphia: Lippincott.

Huff, J. (2006). *ECG Workout: Exercises in arrhythmia Interpretation*. (5th Ed.) Philadelphia: Lippincott.

NRSG 227, NRSG 228, NRSG 229 coursepacks

## NRSG 230 – Critical Care Challenges 1

You will review the respiratory system focusing on anatomy and physiology, assessment, care, and nursing management of complex respiratory diseases. You will plan for the management of patients with respiratory complications.

**Credit unit(s):** 3.0

**Note:** NRSG 230 & 231 are assessed as a block. The PLAR assessment methods and resources can be found following the self-audit for NRSG 231.

<b>NRSG 230 – Critical Care Challenges 1</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Review the anatomy & physiology of the respiratory system.					
▪ Review the anatomic landmarks of the thorax					
▪ Review the respiratory airways					
▪ Review the structure and function of the pulmonary blood lymph supply					
▪ Review mechanics of ventilation					
2. Identify components of a respiratory assessment.					
▪ Review the pertinent components of a respiratory nursing history					
▪ Explain the techniques of inspection, palpation, percussion, and auscultation					
▪ Discuss the purpose of respiratory diagnostic studies of the thorax and associated nursing considerations					
3. Analyze the components of respiratory monitoring.					
▪ Describe the normal values of an arterial blood gas					
▪ Differentiate between the types of arterial blood gas alterations					
▪ Analyze an arterial blood gas result					
▪ Discuss the purpose and limitations of pulse oximetry					
▪ Discuss the purpose and limitations of End Tidal Carbon Dioxide monitoring					
4. Plan for management of the patient with respiratory adjuncts.					
▪ Compare oxygen delivery devices					
▪ Describe methods of bronchial hygiene					

<b>NRSG 230 – Critical Care Challenges 1</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> <li>Distinguish between the four main types of artificial airways (oropharyngeal airway, nasal pharyngeal airway, endotracheal tube, tracheostomy)</li> </ul>					
<ul style="list-style-type: none"> <li>Identify the appropriate respiratory adjunct for the patient’s condition</li> </ul>					
<ul style="list-style-type: none"> <li>Plan for management of the patient with chest tube drainage</li> </ul>					
<ul style="list-style-type: none"> <li>Recognize the complications associated with oxygen therapy</li> </ul>					
<ul style="list-style-type: none"> <li>Recognize the complications associated with respiratory adjuncts</li> </ul>					
<ul style="list-style-type: none"> <li>Plan for management of the patient requiring respiratory adjuncts</li> </ul>					
<b>5. Plan for management of the patient with invasive and non-invasive ventilation.</b>					
<ul style="list-style-type: none"> <li>Identify the indications of invasive and non-invasive ventilation</li> </ul>					
<ul style="list-style-type: none"> <li>Compare the modes of invasive and non invasive assisted ventilation</li> </ul>					
<ul style="list-style-type: none"> <li>Plan for management of ventilator settings and alarms</li> </ul>					
<ul style="list-style-type: none"> <li>Recognize the complications of invasive and non-invasive ventilation</li> </ul>					
<ul style="list-style-type: none"> <li>Identify concepts of weaning patient from invasive and non-invasive ventilation</li> </ul>					
<ul style="list-style-type: none"> <li>Formulate the care plan for the patient with artificial airways and assisted ventilation</li> </ul>					
<b>6. Assess the efficacy of respiratory pharmacological agents.</b>					
<ul style="list-style-type: none"> <li>Discuss pharmacological agents used to manage respiratory problems</li> </ul>					
<ul style="list-style-type: none"> <li>Compare pharmacological agents used to treat respiratory disorders</li> </ul>					
<ul style="list-style-type: none"> <li>Evaluate the efficacy of respiratory pharmacological agents</li> </ul>					
<b>7. Plan for management of primary respiratory diseases.</b>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of pneumonia</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of atelectasis</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of pneumothorax, hemothorax, and pleural effusion</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of pulmonary embolism</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of Chronic Obstructive Pulmonary Disease – bronchitis, emphysema, asthma (chronic, acute exacerbation)</li> </ul>					

<b>NRSG 230 – Critical Care Challenges 1</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> <li>▪ Discuss the pathophysiology and clinical management of acute respiratory failure</li> </ul>					
<ul style="list-style-type: none"> <li>▪ Discuss the pathophysiology and clinical management of Adult Respiratory Distress Syndrome / acute lung injury</li> </ul>					
<ul style="list-style-type: none"> <li>▪ Discuss the pathophysiology and clinical management of thoracic surgery</li> </ul>					
<ul style="list-style-type: none"> <li>▪ Plan for management of primary respiratory diseases</li> </ul>					

## NRSB 231 – Critical Care Challenges 2

You will review the neurological system focusing on anatomy and physiology, assessment, care and nursing management of complex neurological disorders. You will plan for the management of patients with neurological complications.

**Credit unit(s):** 3.0

<b>NRSB 231 – Critical Care Challenges 2</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Review the anatomy and physiology of the neurological system.					
▪ Review the cells of the nervous system					
▪ Review the skull and cranial vault					
▪ Review the meninges, cerebrospinal fluid and the ventricular system					
▪ Review cerebral vasculature, cerebral blood flow and the blood brain barrier					
▪ Review the structure and function of the brain and spinal cord					
▪ Review the peripheral nervous system					
▪ Review the reflexes					
2. Explain the physiological principles of intracranial dynamics.					
▪ Define intracranial pressure					
▪ Describe the Monroe-Kellie Hypothesis					
▪ Discuss intracranial dynamics					
▪ Define auto regulation					
▪ Describe compensatory mechanisms for elevated ICP					
▪ Define cerebral perfusion pressure					
▪ Describe how to calculate cerebral perfusion pressure					
3. Identify components of a neurological assessment.					
▪ Review the components of the neurological history					
▪ Describe the assessment of mental status					
▪ Describe the assessment of the cranial nerves					
▪ Discuss motor evaluation					
▪ Review papillary changes and eye movement					

<b>NRSG 231 – Critical Care Challenges 2</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> <li>Review the principles of thermoregulation</li> </ul>					
<ul style="list-style-type: none"> <li>Review assessment of sensation</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the purpose of neurological diagnostic studies of the head and spine and associated nursing consideration</li> </ul>					
<b>4. Plan for the management of intracranial pressure (ICP) monitoring.</b>					
<ul style="list-style-type: none"> <li>Identify the causes of elevated intracranial pressure</li> </ul>					
<ul style="list-style-type: none"> <li>Describe the purpose of intracranial pressure monitoring</li> </ul>					
<ul style="list-style-type: none"> <li>Identify sites of intracranial pressure monitoring</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the different types (differences, indications, contraindications, and complications, troubleshooting) of intracranial pressure monitoring devices</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the effects of hypo/ hyperthermia on intracranial pressure</li> </ul>					
<ul style="list-style-type: none"> <li>Analyze the intracranial pressure waveforms and values</li> </ul>					
<ul style="list-style-type: none"> <li>Formulate the care plan for the patient with potential or actual alterations in intracranial pressure</li> </ul>					
<ul style="list-style-type: none"> <li>Propose strategies to optimize cerebral perfusion pressure</li> </ul>					
<b>5. Evaluate the efficacy of neurological pharmacological agents.</b>					
<ul style="list-style-type: none"> <li>Discuss pharmacological agents used to manage neurological problems</li> </ul>					
<ul style="list-style-type: none"> <li>Compare pharmacological agents used to treat neurological disorders</li> </ul>					
<ul style="list-style-type: none"> <li>Evaluate the efficacy of neurological pharmacological agents</li> </ul>					
<b>6. Plan for management of neurological disorders.</b>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of stroke</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of seizures</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of primary head injuries</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of spinal cord injury</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of brain tumors</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of aneurysm</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of arteriovenous malformation</li> </ul>					

<b>NRSG 231 – Critical Care Challenges 2</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of diabetes insipidus</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of Syndrome of Inappropriate Diuretic Hormone</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the prevention and treatment of secondary neurological injury</li> </ul>					
<ul style="list-style-type: none"> <li>Plan for management of patients with neurological disorders</li> </ul>					
<b>7. Examine neurological determinants of death.</b>					
<ul style="list-style-type: none"> <li>Describe the types of herniation syndrome</li> </ul>					
<ul style="list-style-type: none"> <li>List the criteria that indicate neurological death</li> </ul>					
<ul style="list-style-type: none"> <li>List the tests that are performed to establish neurological death</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss a plan for supportive care of patient and significant other</li> </ul>					

### PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

#### 1. Challenge exam #2

PLAR Respiratory and Neurological exam

- 150 multiple choice questions
- Writing and passing on one attempt with a grade of at least 60%

### Resources

Morton, P., Fontaine, D.K., Hudak, C., & Gallo, B.M. (2009). *Critical Care Nursing: A holistic approach*. (9<sup>th</sup> Ed.). Philadelphia: Lippincott.

Huff, J. (2006). *ECG Workout: Exercises in arrhythmia Interpretation*. (5th Ed.) Philadelphia: Lippincott.

NRSG 230 & NRSG 231 coursepacks

### NRSB 232 – Critical Care Challenges 3

You will review the renal, gastrointestinal, hematological, immunological, musculoskeletal and integumentary systems. Your studies will focus on anatomy, pathophysiology and nursing management. With a family centered focus, you will plan for the management of the psychological, emotional and physical care of the critically ill patient.

**Credit unit(s):** 3.0

<b>NRSB 232 – Critical Care Challenges 3</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Review the renal, gastrointestinal and endocrine systems.					
▪ Review the anatomy and physiology of the renal system					
▪ Review the hormone control of urine volume/osmolarity					
▪ Review the renal role in electrolyte and acid-base balance					
▪ Review the structure and function of the gastrointestinal system					
▪ Review the structure and function of the endocrine system					
2. Identify the components of a renal history.					
▪ Review the components of the nursing history as it relates to the renal system					
▪ Review the physical examination of the renal system					
▪ Discuss the diagnostic tests and associated nursing implications as they pertain to the renal system					
3. Plan for management of patients with disorders affecting the renal system.					
▪ Review the use of crystalloids and colloids					
▪ Review electrolyte replacement					
▪ Review the pharmacology of commonly used medications that affect the renal system					
▪ Discuss methods to minimize nephrotoxic effects of drugs and poisons					
▪ Discuss the pathophysiology and clinical management of renal failure					
▪ Describe renal replacement therapies					
▪ Plan interventions related to alterations in fluid, electrolyte, and acid-base balance					
4. Identify components of a gastrointestinal / endocrine assessment.					

<b>NRSG 232 – Critical Care Challenges 3</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> <li>Review the components of the nursing history as it relates to the gastrointestinal system</li> </ul>					
<ul style="list-style-type: none"> <li>Review the components of the nursing history as it relates to the endocrine system</li> </ul>					
<ul style="list-style-type: none"> <li>Describe the physical examination of the gastrointestinal system.</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the diagnostic tests and associated nursing implications as they pertain to the gastrointestinal system</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the diagnostic tests and associated nursing implications as they pertain to the endocrine system</li> </ul>					
<b>5. Plan for management of patients with gastrointestinal / endocrine disorders.</b>					
<ul style="list-style-type: none"> <li>Discuss how critical illness alters nutritional support</li> </ul>					
<ul style="list-style-type: none"> <li>Describe the management of the patient with altered nutritional requirements</li> </ul>					
<ul style="list-style-type: none"> <li>Describe the efficacy of gastrointestinal pharmacological agents</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the efficacy of endocrine pharmacological agents</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the pathophysiology and clinical management of common gastrointestinal/ endocrine disorders</li> </ul>					
<ul style="list-style-type: none"> <li>Plan for management of patients with gastrointestinal/endocrine disorders</li> </ul>					
<b>6. Discuss the management of musculoskeletal/integumentary complications.</b>					
<ul style="list-style-type: none"> <li>Review the physiological effects and complications of immobility</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the management and prevention of complications related to immobility</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the management of musculoskeletal complications</li> </ul>					
<b>7. Describe hematological and immunological competencies.</b>					
<ul style="list-style-type: none"> <li>Review the components of blood and the coagulation process</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the management of a patient with coagulopathies</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the immune response to infection</li> </ul>					
<ul style="list-style-type: none"> <li>Discuss the care of a patient with an immunological disease</li> </ul>					
<b>8. Formulate a plan for patient and family centered care.</b>					
<ul style="list-style-type: none"> <li>Identify the roles of the multidisciplinary team, patient and family in decision-making</li> </ul>					

<b>NRSG 232 – Critical Care Challenges 3</b>		<b>Mastery</b>	<b>Competent</b>	<b>Functional</b>	<b>Learning</b>	<b>None</b>
<b>Mastery:</b>	I am able to demonstrate it well enough to teach it to someone else.					
<b>Competent:</b>	I can work independently to apply the outcome.					
<b>Functional:</b>	I need some assistance in using the outcome.					
<b>Learning:</b>	I am developing skills and knowledge for this area.					
<b>None:</b>	I have no experience with the outcome.					
	<ul style="list-style-type: none"> <li>Discuss barriers to effective communication in the critical care environment</li> </ul>					
	<ul style="list-style-type: none"> <li>Utilize ethical frameworks in decision-making</li> </ul>					
	<ul style="list-style-type: none"> <li>Discuss strategies to optimize patient-family centered care</li> </ul>					
	<ul style="list-style-type: none"> <li>Formulate a plan for patient and family centered care</li> </ul>					
	9. Formulate a plan to optimize patient comfort.					
	<ul style="list-style-type: none"> <li>Review the physiology of pain</li> </ul>					
	<ul style="list-style-type: none"> <li>Describe how to assess a patient’s comfort level</li> </ul>					
	<ul style="list-style-type: none"> <li>Describe pain management</li> </ul>					
	<ul style="list-style-type: none"> <li>Formulate a plan to optimize patient comfort</li> </ul>					

### PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

#### 1. Challenge exam #3

PLAR Critical Care Challenges 3 exam – NRSG 232

- 100 multiple choice questions
- Writing and passing on one attempt with a grade of at least 60%

### Resources

Morton, P., Fontaine, D.K., Hudak, C., & Gallo, B.M. (2009). *Critical Care Nursing: A holistic approach*. (9<sup>th</sup> Ed.). Philadelphia: Lippincott.

Huff, J. (2006). *ECG Workout: Exercises in arrhythmia Interpretation*. (5th Ed.) Philadelphia: Lippincott.

NRSG 232 coursepack

### CLIN 212 – Clinical Practice 3

You will participate in a clinical experience (60 hours in total) integrating all aspects of the program into your nursing practice in the critical care area. A critical care preceptor will guide your practice and the development of critical care nursing skills and patient / family centered care.

**Credit unit(s):** 4.0

<b>CLIN 212 – Clinical Practice 3</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Manage care of a critically ill patient.					
▪ Perform a complete assessment on patients using preceptor as a resource					
▪ Document complete assessment on patient					
▪ Apply diagnostic data to patient					
▪ Revise care plan based on life threatening alterations in patient status					
▪ Manage critically ill patients					
2. Integrate critical care thinking skills.					
▪ Assess patient, problems and response to treatment using a preceptor as a resource					
▪ Organize using a preceptor as a resource					
▪ Prioritize activities using a preceptor as a resource					
3. Integrate clinical decision-making skills.					
▪ Integrate information to facilitate clinical decision-making using preceptor as a resource					
▪ Provide safe patient care in an accountable manner using preceptor as a resource					
4. Communicate effectively with patients and the health care team.					
▪ Communicate effectively with patient and preceptor					
▪ Ask pertinent questions					
▪ Give report					
▪ Document appropriately according to agency policies and procedures					
5. Manage hemodynamic pressure monitoring.					
▪ Apply the principles of hemodynamic pressure monitoring system set up to patient					

<b>CLIN 212 – Clinical Practice 3</b> <b>Mastery:</b> I am able to demonstrate it well enough to teach it to someone else. <b>Competent:</b> I can work independently to apply the outcome. <b>Functional:</b> I need some assistance in using the outcome. <b>Learning:</b> I am developing skills and knowledge for this area. <b>None:</b> I have no experience with the outcome.	<b>Mastery</b>	<b>Competent</b>	<b>Functional</b>	<b>Learning</b>	<b>None</b>
▪ Perform zeroing and levelling independently					
▪ Perform blood sampling independently					
▪ Explain the significance of hemodynamic values					
▪ Obtain accurate wedge pressure					
▪ Troubleshoot hemodynamic pressure monitoring system					
▪ Perform cardiac output					
6. Administer pharmacological agents to critically ill patients.					
▪ Review medication, including drug infusions, and applicability to patient's condition					
▪ Differentiate between the different pharmacological agents and when to use them					
▪ Administer pharmacological agents to critically ill patients					
7. Complete one Clinical Log on critically ill patients.					
▪ Research patient					
▪ Assess patient					
▪ Integrate anatomy, physiology and pathophysiology of patient's condition					
▪ Integrate lab values / test results in relation to clinical condition					
▪ Complete two clinical logs on critically ill patients					

### PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

#### 1. Clinical shifts

Completion of (5) 12-hour clinical shifts, including submission of a Daily Patient Assessment and Clinical Performance Evaluation form for each shift.

Please refer to [Appendix A](#).

- Grading is determined on a "pass or fail" basis. The evaluation rubric is located in the Clinical Performance Evaluation form.

## 2. Clinical Skills Checklist

Completion of the Clinical Skills Checklist. Please refer to [Appendix B](#).

- All clinical skill components are required to be signed off at a “competent” level.

## 3. Clinical Log

Completion of one clinical log. Please refer to [Appendix C](#).

- A passing grade of 60% is required. Assignment expectations are located within the Clinical Log template.

## Resources

Morton, P., Fontaine, D.K., Hudak, C., & Gallo, B.M. (2009). *Critical Care Nursing: A holistic approach*. (9<sup>th</sup> Ed.). Philadelphia: Lippincott.

Huff, J. (2006). *ECG Workout: Exercises in arrhythmia Interpretation*. (5th Ed.) Philadelphia: Lippincott.

Full program clinical coursepack (refer to the CLIN 212 sections only)

# Basic Critical Care Nursing Advanced Certificate program



## Appendices

## Appendix A

### Clinical 212 – Assessment method 1

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#### Includes:

- Guidelines for Completing the Daily Patient Assessment and Clinical Performance Evaluation
- SIAST Basic Critical Care Nursing Program Pathway
- Clinical Performance Evaluation form
- Daily Patient Assessment form

## **Guidelines for completing the daily patient assessment and clinical performance evaluation forms**

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### **Clinical Performance Evaluation Form – Guidelines**

The purpose of this form is to guide the preceptor and student in clinical performance expectations and evaluation of clinical progress for CLIN 210, 211 and 212. Each clinical course- CLIN 210, 211 and 212-has its own specific evaluation form. Please ensure that you provide the form that coincides with the clinical course. Students will be evaluated by the preceptor for every shift (1 through 12) and the CE may assist the preceptor with the evaluation process. Categories evaluated include assessment, critical thinking, decision-making, technical skills, and communication.

### **Performance Rating: Pass/Fail**

In order to pass, students must meet the requirements as outlined on the “rating” and “grading” scale as located on each clinical form. Also note that there are specific performance objectives for each clinical course.

CLIN 210 requires a rating of 2.0 or above in each category by the last shift in CLIN 210.

CLIN 211 requires a rating of 2.0 or above in each category by the last shift in CLIN 211.

CLIN 212 requires a rating of 3.0 by the last shift in CLIN 212.

If performance expectations are not met the student may be placed on an academic learning plan per SIAST policy.

**Note:** The expected level of performance is that of a beginning practitioner in critical care (entry level of practice).

### **Daily Patient Assessment – Guidelines**

This form is filled out by the student and is sent to BCCN program faculty along with the daily *Clinical Performance Evaluation* form. Please complete one for each clinical shift. The form itself is not graded; however, it provides faculty with more detailed information that reflects upon the level of care that was provided and how the student reflects on his/her performance.

**NOTE:** The expected level of performance is that of a beginning practitioner in critical care (entry level of practice).

### **Instructions for completing the forms**

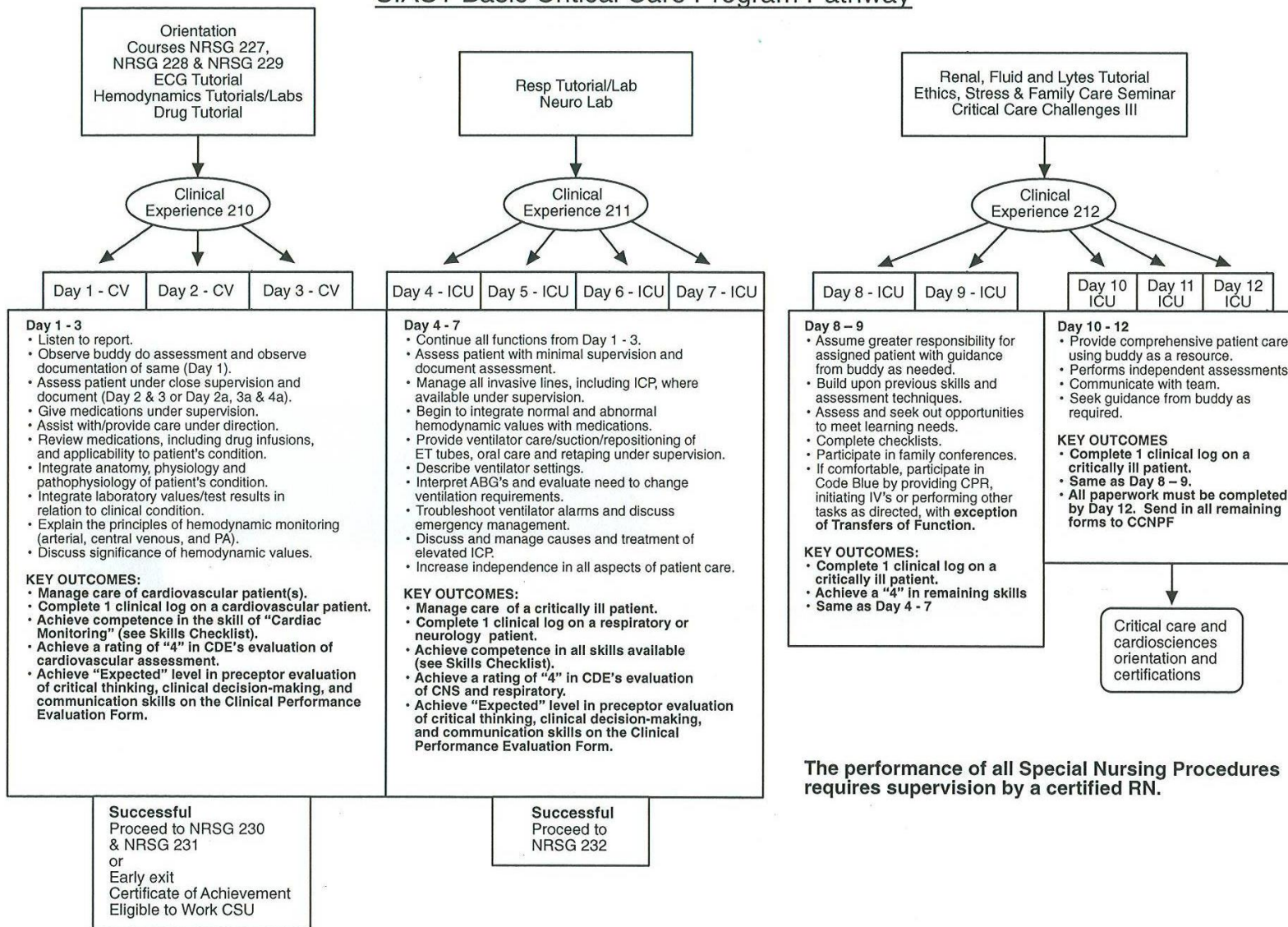
The PLAR candidate will:

1. arrange for the charge nurse, clinical educator or manager to take a few minutes during or at the end of each shift to fill in the *Clinical Performance Evaluation* form;
2. fax the completed *Clinical Performance Evaluation* form along with the completed *Daily Patient Assessment* form at the end of each shift to the SIAST program faculty at (306) 798-2027;
3. mail the original copies of the forms to the SIAST program faculty;
4. keep copies of forms, assignments and all required materials for **each** of your clinical shifts.

### **NOTE:**

- The PLAR candidate must complete a *Daily Patient Assessment and Clinical Performance Evaluation* form for each of the 5 clinical shifts.
- **One copy of each form is included in the PLAR Candidate Guide. Candidates are responsible for making additional copies.**

## SIAST Basic Critical Care Program Pathway



## Clinical Performance Evaluation form PLAR CLIN 212 (Shifts 1-5)

Date: \_\_\_\_\_ Shift#: \_\_\_\_\_ Student name (print): \_\_\_\_\_

► Patient acuity delegation (circle):            1 – Transfer or discharge (order written)            2 – Stable            3 – Unstable

### Main objective: Independently manages care of a basic intensive care unit-type patient

Basic intensive care unit-type patient is any patient in the intensive care unit that is relatively stable. Instability can occur but this would be situational and non-sustained. Hemodynamic monitoring should be instituted and may include up to arterial, central venous and PA. More than likely, this patient will be mechanically ventilated. Students will be expected to manage one intensive care unit-type patient by the end of Clinical 212 utilizing the preceptor as a resource only.

**NOTE:** If a patient becomes unstable student evaluation must still occur within the realm of BCCN clinical performance expectations. Faculty will determine exceptions for performance ratings based on patient acuity and information presented on the Daily Patient Assessment form.

**Key performance objectives:** (√ if observed and provide overall performance rating below)

Assessment	Critical thinking and decision-making	Communication	Technical skills
<input type="checkbox"/> Performs complete assessment on a patient in an organized and systematic fashion with preceptor as a resource only <input type="checkbox"/> Obtains pertinent subjective and objective data <input type="checkbox"/> Documents assessment findings <input type="checkbox"/> Performs follow-up assessments as needed	<input type="checkbox"/> Interprets information (Ex: VSs, and lab results) develops and evaluates plan of care and critically reflects on actions and decisions <input type="checkbox"/> Demonstrates effective decision-making skills (preceptor is utilized as a resource only): <input type="checkbox"/> Organizes care <input type="checkbox"/> Prioritizes activities <input type="checkbox"/> Revises care plan according to patient status <input type="checkbox"/> Responds appropriately to changes in patient condition	<input type="checkbox"/> Communicates effectively with patient, family and preceptor <input type="checkbox"/> Responds to abnormal findings and communicates findings to the healthcare team <input type="checkbox"/> Asks questions <input type="checkbox"/> Gives accurate report <input type="checkbox"/> Timely ongoing charting <input type="checkbox"/> Communicates and practices in a professional, accountable and ethical manner	<input type="checkbox"/> Administers medications safely and according to agency policy (Ex: 5 Rs of administration) <input type="checkbox"/> Manages equipment according to policy and procedure guidelines and performs procedures correctly <input type="checkbox"/> Implements cardiac and hemodynamic monitoring: <input type="checkbox"/> Selects electrode placements and leads <input type="checkbox"/> Selects alarms and settings <input type="checkbox"/> Analyzes ECG rhythm <input type="checkbox"/> Applies 12 lead ECG findings to patient condition <input type="checkbox"/> Sets-up and manages hemodynamic lines - levels and zeros, obtains accurate measurements, troubleshoots monitoring system, performs wedge and CO measurements <input type="checkbox"/> Performs skills related to mechanical ventilation - suctioning, care of ETTs and VAP prevention <input type="checkbox"/> Performs skills related to managing ICP set-up - levels and zeros, and troubleshoots

<b>Rating scale:</b> <b>3</b> functions independently without supporting cues*, uses preceptor as a resource only <b>2</b> functions with supervision, requiring supporting cues* <b>1</b> functions with assistance, requiring frequent prompting and/or direction of basic skills <b>0</b> functions dependently, student is passive and mainly observes  <i>*Supporting cues = collaborative conversation between student and preceptor. Preceptor initiates.</i>	<b>Grading scale:</b> <b>Pass:</b> Rating of 3.0 in each category by the end of CLIN 212  <b>Academic clinical probation:</b> Rating of less than 3.0 in any category by the end of Clinical 212
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Rating (circle)				Rating (circle)				Rating (circle)				Rating (circle)			
3	2	1	0	3	2	1	0	3	2	1	0	3	2	1	0

Overall strengths: \_\_\_\_\_ Areas to improve: \_\_\_\_\_

PLAR Student Signature: \_\_\_\_\_ Preceptor Name (print): \_\_\_\_\_ Preceptor signature: \_\_\_\_\_

Fax completed forms to: (306) 798-2027 and provide a copy to clinical educator

## Daily Patient Assessment form

### Daily Patient Assessment

The Daily Patient Assessment provides reflective information regarding the patient care that **you** provided to your patient today. Complete, sign and send this form to the Basic Critical Care Nursing program faculty after each shift. Information can be added or additional copies of this form can be made if students have been assigned to more than one patient.

Date \_\_\_\_\_ Shift#: \_\_\_\_\_ Student's name (print): \_\_\_\_\_ Unit: \_\_\_\_\_

Patient's age/days on unit: \_\_\_\_\_ / \_\_\_\_\_ Admitting diagnosis: \_\_\_\_\_

Patient's previous medical history: \_\_\_\_\_

Patient	Yes √	Indicate key interventions involving your patient (i.e. extubation) and whether or not your participation with these interventions was preceptor assisted or independent with minimal assistance.
Warming or cooling devices		
ICP monitoring		
External ventricular device		
Neuromuscular blocking agents		
Arterial blood pressure monitoring		
Peripheral Cardiac Output monitoring device		
Central Venous catheter		
Pulmonary Artery catheter		
Pacemaker - temporary (attached and on)		
Pacemaker - permanent		
Intra-aortic balloon pump		
Cardiac arrest		
Titration of IV drips* (At side of table, please list drips patient is on. *Please indicate which drips <b>you</b> titrated).		
Ventilated % O <sub>2</sub> _____ Circle:      Invasive                                  Non-invasive ventilation                                  ventilation		
Nasogastric tube / Oral gastric tube / Small bore tube		
Chest tube /Pleural drainage		
Dialysis (peritoneal / intermittent / continuous)		
Simple/complex dressings		
Patient provides self care		
Patient requires assistance with care		
Patient requires total care		
Complex psychosocial issues		
Patient procedures during shift		

Point out and reflect on your overall strengths:

What were your key learning points for yourself today?

Indicate areas to improve your clinical experience:

Were there any barriers to learning during this shift?

## Appendix B

### Clinical 212 – Assessment method 2

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**Includes:**

- Essential Skills Competency Profile
- Skills Checklist
- Skills Checklist – guidelines for use

## Essential Skills Competency Profile

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In order to successfully complete this course, the PLAR candidate must competently perform the following skills:

**Note:** Evidence of competency is provided to SIAST Program faculty by completing and submitting the "Skills Checklist" (following the *Skills Checklist – Guidelines for Use*). The Essential skills competency profile outlines specific skills for each component of the skills checklist.

*Definition:*

**Competent** – The PLAR candidate is able to perform the skill safely and independently according to the Essential Skills Competency Profile.

### Cardiovascular

- Cardiac monitoring
- Hemodynamic pressure monitoring
  - Arterial pressure monitoring
  - CVP monitoring
  - Pulmonary artery pressure monitoring
- Obtaining a blood sample from an arterial line
- Removing an arterial line
- Obtaining pulmonary capillary wedge pressure (PCWP) from pulmonary artery catheter
- Performing cardiac output

### Neurological

- Intracranial pressure monitoring
- External ventricular drain management

### Respiratory

- ETT care
- Suctioning ETT/Tracheostomy
- Manual ventilation via ETT or Tracheostomy
- Ventilator management and troubleshooting
- Management of chest tubes

### Skill: Cardiac monitoring

Criteria
Initiates 5 lead ECG monitoring
Performs proper skin preparation
Applies leads correctly
Verifies adequate waveform
Selects appropriate monitoring leads
Sets appropriate alarm parameters
Records ECG strip from monitor
Uses systematic approach to rhythm interpretation
Interprets ECG Rhythm
Mounts the rhythm strip in the patient care record
Documents measurements and rhythm interpretation

### Skill: Hemodynamic pressure monitoring (PAP, CVP, Arterial)

Criteria
Levels and zeroes the transducer
Ensures patency of the system i.e. pressure bag inflated, adequate flush solution, connections tightened
Performs square wave test
Sets appropriate alarm parameters for patient condition and physician's orders
Records hemodynamic pressures on the patient care record
Obtains recording of hemodynamic pressure waveforms from monitor
Mounts hemodynamic pressure waveforms on patient care record
Troubleshoots rationale for dampened waveform i.e. catheter kink, malpositioning of wrist, pressure bag deflated and inappropriate scale on monitor

### Skill: Obtaining a blood sample from an arterial line

Criteria
Collects appropriate supplies
Suspends alarms
Obtains sample maintaining patient safety and sterile technique
Discards the appropriate amount of waste
Obtains specimens in the correct order
Flushes the system
Resets alarms
Labels tubes appropriately and sends to the lab
Documents in the patient care record

### Skill: Removal of arterial line

Criteria
Confirms physician's order
Collects supplies
Turns off arterial blood pressure alarms and disconnects pressure cable from transducer
Deflates pressure bag
Closes system to patient
Removes dressing
Removes arterial line while applying firm pressure to site
Applies pressure for a minimum of 5 minutes with sterile gauze
Ensures hemostasis prior to applying dressing over site
Documents on patient care record

### Skill: Obtaining PCWP from PA catheter

Criteria
Positions patient supine with head of bed 0 - 40°
Ensures transducer is levelled and zeroed at the phlebostatic axis
Fills PA syringe with 1 – 1.5 ml air
Selects appropriate screen on bedside monitor for wedging
Inflates PA balloon slowly until wedge waveform appears or resistance is met
Passively deflates balloon after 2 – 4 respiratory cycles
Observes monitor for return of PA waveform in order to ensure adequate deflation
Disconnects syringe and expels air to avoid accidental balloon inflation
Reconnects empty syringe to balloon port
Leaves balloon port open
Measures PCWP at end expiration
Records PCWP on patient care record

### Skill: Performs cardiac output

Criteria
Ensures patient supine with head of bed 0 - 40°
Levels and zeroes transducer at phlebostatic axis
Selects appropriate screen on bedside monitor for cardiac outputs
Verifies correct computation constant
Attaches cardiac output syringe to proximal port of PA catheter
Connects injectate thermistor to cardiac output syringe
Fills syringe with appropriate volume of injectate solution
Rapidly injects solution at end expiration of patient's respiratory cycle when prompted by monitor
Repeats procedure until 3 cardiac outputs obtained are within 10% of each other
Re-establishes CVP monitoring or IV infusion
Performs hemocalculations
Records hemodynamic measurements on patient care record

### Skill: Intracranial pressure monitoring

Criteria
Levels and zeroes transducer at the external auditory meatus (Foramen of Munro)
Ensures all system connections are tight and ports capped
Verifies appropriate alarm parameters
Selects appropriate scale for measured pressure
Calculates cerebral perfusion pressure (CPP)
Records ICP and CPP on patient care record
Obtains and mounts intracranial pressure waveform strip on patient care record
Troubleshoots rationale for dampened waveform i.e., incorrect scale on monitor, catheter occlusion and notifies physician when corrective action required

### Skill: External ventricular drain (EVD) management

Criteria
Verifies physician's orders for system management, i.e., opened to drain continuously or intermittently, prescribed height of drainage chamber
Ensures drainage system is levelled and zeroed at the external auditory meatus (Foramen of Munro)
Verifies that all connections are tight and ports capped
Adjusts chamber height level to prescribed pressure level, as necessary
Documents volume, color and clarity of EVD drainage on patient care record
Obtains ICP measurement by clamping the system off to drainage only long enough to determine ICP
Records ICP on patient care record
Troubleshoots rationale for change in drainage volume and character, i.e., EVD occlusion, clamped tubing, increasing hydrocephalus, bleeding
Reports changes to physician promptly
Clamps system to drainage when repositioning or moving patient

### Skill: ETT tube care

Criteria
Ensures appropriate equipment present and functional; i.e., BVM unit, oral care supplies, suction
If intubated greater than 24 hours, ensures that proper approved ETT securement device applied Comment – type of securing device used _____
Dons appropriate personal protective equipment
Positions patient in semi-fowlers/Fowler's position (if not contraindicated)
Manipulates the ETT using two qualified staff members i.e. RT and RN, or 2 RNs
Assesses tube depth and repositions tube to opposite side of mouth
Secures ETT at appropriate depth (marking)
Assesses patient's condition, i.e., auscultates for bilateral air entry, evaluates oxygen saturations and hemodynamic status, and skin condition
Performs oral care q 2-4 h per institutional guidelines
Documents on patient care record

### Skill: Suctioning ETT/tracheostomy

Criteria
Ensures appropriate equipment present and functional
Positions patient in semi-fowlers/Fowler's position (if not contraindicated)
Confirms suction level is at 80 – 120 mmHg
Dons appropriate personal protective equipment
If performing open suction technique: <ul style="list-style-type: none"> <li>Utilizes sterile technique in handling equipment and performing procedure</li> <li>Hyper oxygenates patient with 100% oxygen for a minimum of 30 seconds with bag – valve device prior to procedure</li> <li>Connects suction catheter to suctioning tubing</li> <li>Dons sterile gloves</li> <li>Removes ventilator from ETT/Trach</li> <li>Manually ventilates patient with 100% oxygen between suction passes</li> </ul>
If performing closed suction technique: <ul style="list-style-type: none"> <li>Utilizes clean technique when handling supplies</li> <li>Administers 100% oxygen for a minimum of 30 seconds via the ventilator prior to performing the procedure (hyperoxygenation function)</li> </ul>

### Criteria

Procedure for open and closed suction techniques:

- Inserts catheter quickly but gently down the ETT without application of suction
- Inserts catheter until resistance is met, then withdraws 1 cm
- Applies continuous suction and withdraws the catheter within 10 seconds
- Hyperoxygenates the patient following
- Flushes the suction catheter with sterile normal saline as necessary
- ETT/Tracheostomy suctioning should be limited to two passes

Allows patient to rest between passes

Returns patient to original oxygen source and verifies settings

Suctions oropharynx

Disposes of equipment

Assesses patient's condition, i.e., auscultates lungs, evaluates oxygen saturations and hemodynamic status, ensures ETT patency

Documents in the patient care record

Notifies physician of suspicious findings, i.e., yellow or green sputum

### Skill: Manual ventilation via ETT or tracheostomy

### Criteria

Ensures appropriate equipment present and functional

- Bag-valve-mask
- Oxygen flow meter and tubing
- Suction supplies
- Oral/nasopharyngeal airways (if necessary)
- Protective equipment – face shield, gloves

Set flow meter to flush (15L/min) to keep reservoir bag  $\frac{3}{4}$  full

Positions patient appropriately

Ensures ETT properly secured

Ensures ETT/Trach cuff is appropriately inflated to seal the airway

Ventilates the patient with appropriate tidal volume in synchrony with patient's respiratory efforts

Assesses patient's condition

i.e. monitors for equal, bilateral chest expansions and evaluates oxygen saturations and hemodynamic status

### Skill: Ventilator parameter and troubleshooting

Criteria
Performs appropriate respiratory assessment for ventilated patient
Identifies and explains ventilation parameters of the patient
Troubleshoots ventilator alarms
Silences alarms
Systemically evaluates cause of alarm
Initiate appropriate corrective measures

### Skill: Chest tubes and drainage

Criteria
Provides appropriate analgesia/sedation if ordered
Ensures suction regulator functional
Ensures underwater seal and suction regulation chambers are filled to appropriate levels with sterile water
Ensures a sterile dressing over insertion site and tapes are secure
Ongoing patient assessment and documentation following insertion <ul style="list-style-type: none"> <li>▪ Vital signs</li> <li>▪ Chest drainage for color, amount and consistency</li> <li>▪ Underwater seal compartment for fluctuation/tidaling and bubbling</li> <li>▪ Drainage tube or chest tubes for kinks, loops or clots</li> <li>▪ Heimlich valves: for air escaping from the valve</li> <li>▪ Small bore pleural tubes: Assess for tube obstructions and initiates corrective action i.e. milks tubing, flushes tubing under direction of physician's order if certified</li> </ul>
Reports to the physician <ul style="list-style-type: none"> <li>▪ Excessive drainage or sudden change in amount or quality of drainage</li> <li>▪ No fluctuation/tidaling in the underwater seal compartment</li> <li>▪ Sudden change in patient's condition</li> </ul>

## Skills Checklist

Name: \_\_\_\_\_

The following essential skills must be completed during the clinical portion of the course. The PLAR candidate is responsible for obtaining practice and seeking out opportunities to obtain competency performing the skills. The candidate's charge nurse, clinical educator or manager will confirm competency by initialling and dating each skill.

*Definition:*

**Competent** – The PLAR candidate is able to perform the skill safely and independently according to the Essential Skills Competency Profile.

Name of charge nurse, clinical educator or manager	Signature	Initials

Skills checklist	Competent (Initials and date)
1. Cardiac monitoring	
2. Hemodynamic Pressure Monitoring Arterial pressure monitoring CVP monitoring Pulmonary artery pressure monitoring	
3. Obtaining a blood sample from an arterial line	
4. Removing an arterial line	
5. Obtaining pulmonary capillary wedge pressure (PCWP) from pulmonary artery catheter	
6. Performing cardiac output	
7. Intracranial pressure monitoring	
8. External ventricular drain management	
9. ETT care	
10. Suctioning ETT/Tracheostomy	
11. Manual ventilation via ETT or Tracheostomy	
12. Ventilator management and troubleshooting	
13. Management of chest tubes	

## **Skills Checklist - Guidelines for use**

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1. This is a formal evaluation document.
2. Charge nurse, clinical nurse educator, or manager must initial completion of each skill.
3. Evaluation may be done at any time throughout the clinical component of the PLAR process.
4. PLAR candidate must achieve a rating of "competent" for each skill segment in order to be successful.
5. Completed skills assessment forms must be submitted to SIAST program faculty before certification can be granted.
6. Documents will be kept on file by SIAST program faculty.
7. Evaluators may use their discretion as to how the evaluation of skill attainment is to be performed i.e. observation of skills or one to one discussion with candidate.
8. Concerns about the clinical performance of these skills, or the assessment and evaluation of the skills, should be discussed with the SIAST program faculty.

## Appendix C

### Clinical 212 – Assessment method 3

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**Includes:**

- Clinical log assignments and marking criteria
- Clinical log

## **Clinical log assignment and marking criteria**

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### **Purpose**

Clinical log assignments are an integral component of the BCCN program as they are designed to foster critical reflection and enhance the student's clinical learning experience. Clinical logs also allow the program faculty to evaluate praxis. In other words, how well the student relates theory to practice. The main objective of the assignment is to outline pertinent nursing diagnosis based on theoretical knowledge, interventions and patient care findings.

### **Value**

The clinical log will be graded out of 40 marks with a minimum passing grade of 24 (or 60%). Each section will be weighted as follows:

- Assessment information: /5
- Assessment findings and related nursing and medical interventions: /15
- Relevant diagnostic test and lab values: /5
- Priorities of care: /10
- Medication: /5

The clinical log is due prior to completing the last clinical shift in the PLAR clinical component. The PLAR candidate must achieve a passing grade on the clinical log assignments to successfully pass the corresponding clinical course.

### **Clinical Log Assignment**

For **CLIN 212** you will be required to hand in one clinical log from your 5 clinical shifts. The clinical log must include:

- Information related to a critically ill patient with complex problems.
- Information on a patient that you cared for during this clinical rotation.
- Thorough presentation of admission information, assessment findings, relevant diagnostic test and lab values and priorities, nursing interventions and medications as outlined in the log assignment.
- Pathophysiology should be incorporated in to sections where rationale is required.

<b>Marking criteria</b>	
<b>35-40 Marks</b>	<ul style="list-style-type: none"> <li>• The PLAR candidate's clinical log was organized and information was presented in a concise and clear manner.</li> <li>• There is thorough presentation of admission information, assessment findings, relevant diagnostic test and lab values and priorities, nursing interventions and medications as outlined in the log assignment.</li> </ul>
<b>30-35 Marks</b>	<ul style="list-style-type: none"> <li>• The PLAR candidate's clinical log was organized and information was presented in a concise and clear manner.</li> <li>• There is adequate presentation of admission information, assessment findings, relevant diagnostic test and lab values and priorities, nursing interventions and medications as outlined in the log assignment.</li> <li>• There may be information missing that could enhance the quality of the log.</li> </ul>
<b>24-30 Marks</b>	<ul style="list-style-type: none"> <li>• The PLAR candidate's clinical log was organized however information lacked clarity and conciseness.</li> <li>• Presentation of admission information, assessment findings, relevant diagnostic test and lab values and priorities, nursing interventions and medications as outlined in the log assignment was satisfactory.</li> <li>• Some pertinent information is missing.</li> </ul>
<b>24 Marks</b>	<ul style="list-style-type: none"> <li>• The PLAR candidate's clinical log was unorganized and information lacked clarity and conciseness.</li> <li>• Inadequate presentation of admission information, assessment findings, relevant diagnostic test and lab values and priorities, nursing interventions and medications as outlined in the log assignment.</li> <li>• Pertinent information is missing.</li> </ul>

## Clinical Log Template - to be completed electronically

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### Purpose:

To show the integration of theoretical and practical knowledge within the clinical setting.

This is a chance to show your **depth** in understanding the information you have learned in the theory, labs, and tutorials as well as practical experience within the clinical setting. It is also a way to demonstrate your critical thinking abilities.

- Reference list required and plagiarism is unacceptable.
- Your name and the page number must appear on all pages.

Clinical log assignment #: \_\_\_\_\_ Date: \_\_\_\_\_

Student's clinical day: \_\_\_\_\_ /12 Clinical facility: \_\_\_\_\_ Unit: \_\_\_\_\_

Patient's hospital admission date: \_\_\_\_\_ # of days in critical care unit: \_\_\_\_\_

### Admission information

1. Indicate the patient's primary diagnosis/reason for critical care admission.
2. Show relevant patient information related to the admitting diagnosis. (Please include presenting signs and symptoms, related medical/surgical history and relevant risk factors).
3. If applicable, provide a brief synopsis of pertinent events and/or changes that have occurred up until your assigned shift with this patient. Has the initial diagnosis and/or reasons for admission to critical care changed?

### Assessment findings and related nursing and medical interventions

1. Actual Findings: Indicate actual assessment findings identified during your shift and include significant changes. A timeline or range may be necessary to capture these variances. For example, "ABP mean 40-70mmHg" or "LOC fluctuated-GCS 8-11".
2. Related Nursing and Medical Interventions: Include nursing and medical interventions employed based on assessment data and systems category.

System	Actual Findings	Nursing & Medical Interventions
CNS		
CVS		
Respiratory		
GI		
GU		
Endocrine		
Integument		
Psychosocial		

### Relevant diagnostic tests and lab values

1. List all recent and relevant diagnostic and lab tests.
2. Specify why the diagnostic and lab tests were ordered for this patient.
3. Indicate the results for each diagnostic and lab test (include evidence of changes).
4. Outline treatments related to the results. Include a brief statement(s) of why the treatment was important. **Note:** Some of this information may be discussed in the priorities; therefore, you may refer the evaluator to that section of the assignment.

Lab/Diagnostic Test	Reason for test/labs	Results	Treatment related to results

### Priorities of care

1. Identify the top 3 priority nursing diagnosis for your patient. Explain your rationale for choosing these top 3 priorities. Justify your response by relating to pathophysiological processes and patient care outcomes.

### Medication

1. List all significant prescribed medications your patient received and describe the rationale for administering this medication.

Medication	Rationale

### References

1. It is recommended that students include at least 2 references. One of which should be the Morton & Fontaine (2009) text.
2. References should be in APA format.