Advanced Pre-Nursing Seminar

Industry Sector: Health Science and Medical Technology
Pathway: Patient Care

This course is designed to prepare students for future employment and/or education to become a nurse assistant, registered nurse, nurse practitioner, or one of the many other career fields/specialties within the nursing field. Students will learn patient care, observation, and communication skills. Integrated throughout the course are career preparation standards that include basic academic skills, interpersonal skills, problem solving, safety, and technology. Worksite learning is a component of this class.

Last Revised: August 11, 2017

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<tr>
<th>Program Information</th>
<th>CTE Certification Elements</th>
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<tr>
<td><strong>Industries / Pathways:</strong> Health Science and Medical Technology Industry: Patient Care Pathway</td>
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<tr>
<td><strong>Grade Levels:</strong> 12</td>
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<tr>
<td><strong>CSU/UC Approval:</strong> No</td>
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<td><strong>Community College Course:</strong> No</td>
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<tr>
<td><strong>Pathway Sequence(s) That Include This Course:</strong></td>
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<tr>
<td>1. Patient Care Pathway Course Sequence:</td>
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<tr>
<td>Introduction to Health and Human Service Careers or Health Professions and Organizations</td>
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<tr>
<td>First Aid, Emergency Response and CPR Career Explorations</td>
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<td><strong>Course Level:</strong> Capstone</td>
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<td><strong>CALPADS Pathway:</strong> HLT - 198</td>
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<tr>
<td><strong>CALPADS Course Title:</strong> Advanced Pre-Nursing Seminar</td>
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<tr>
<td><strong>State Course ID:</strong> 7922</td>
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<td><strong>Total Hours:</strong> 45</td>
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<td><strong>Course Length:</strong> 1 Semester</td>
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<td><strong>Local Course Number:</strong> PC5300</td>
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<td><strong>Board Approval:</strong> Pending Board Action on 12/7/17</td>
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<td><strong>Labor Market Demand:</strong> High</td>
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<td><strong>Course Type:</strong> Career-Technical Preparation</td>
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Public Health or Health and Social Justice or Medical Terminology
Hospital/Clinical Internship (10th, 11th, 12th)
Realities of Nutrition or Substance Abuse and Public Health
CPR Recertification
Advanced Pre-nursing Seminar or Advanced Internship

Competencies / Outcomes

1. Demonstrate a willingness to learn.
2. Participate actively as a member of a team.
3. Communicate professionally with others through verbal, non-verbal and/or written communication.
4. Utilize workplace learning experiences to demonstrate and expand upon knowledge and skills.
5. Demonstrate the ability to seek, apply and/or interview for employment.

Standards
California's 2013 CTE Standards

1. CTE.HSMT.KPAS.2.2 Identify barriers to accurate and appropriate communication.
2. CTE.HSMT.KPAS.2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
3. CTE.HSMT.KPAS.2.8 Understand and use correct medical terminology for common pathologies.
4. CTE.HSMT.KPAS.3.1 Identify personal interests, aptitudes, information, and skills necessary for informed career decision making.
5. CTE.HSMT.KPAS.3.2 Evaluate personal character traits such as trust, respect, and responsibility and understand the impact they can have on career success.
6. CTE.HSMT.KPAS.3.4 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure.
7. CTE.HSMT.KPAS.3.9 Develop a career plan that reflects career interests, pathways, and postsecondary options.
8. CTE.HSMT.KPAS.6.2 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.
9. CTE.HSMT.KPAS.6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.
10. CTE.HSMT.KPAS.6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.
11. CTE.HSMT.KPAS.7.4 Practice time management and efficiency to fulfill responsibilities.
12. CTE.HSMT.KPAS.7.7 Demonstrate the qualities and behaviors that constitute a positive and professional work demeanor, including appropriate attire for the profession.
13. CTE.HSMT.KPAS.8.1 Access, analyze, and implement quality assurance standards of practice.
14. CTE.HSMT.KPAS.8.3 Demonstrate ethical and legal practices consistent with Health Science and Medical Technology sector workplace standards.
15. CTE.HSMT.KPAS.8.4 Explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.
16. CTE.HSMT.KPAS.10.2 Comply with the rules, regulations, and expectations of all aspects of the Health Science and Medical Technology sector.
17. CTE.HSMT.KPAS.10.4 Collaborate with industry experts for specific technical knowledge and skills.
18. CTE.HSMT.KPAS.10.5 Complete certification in emergency care as appropriate (cardiopulmonary resuscitation [CPR], automated external defibrillator [AED], first aid).
19. CTE.HSMT.KPAS.11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Health Science and Medical Technology sector program of study.
20. CTE.HSMT.KPAS.11.2 Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.
21. CTE.HSMT.KPAS.11.5 Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.
22. CTE.HSMT.B.2.3 Recognize common disease and disorders of the human body.
23. CTE.HSMT.B.2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.
24. CTE.HSMT.B.4.1 Conduct basic interview to acquire new knowledge (e.g., medical and family histories).
25. CTE.HSMT.B.4.3 Observe patient actions, interests, and behaviors while documenting responses.
26. CTE.HSMT.B.4.4 Collect and synthesize information or data about the patient’s symptoms and vital signs.
27. CTE.HSMT.B.5.1 Use medical terminology in patient care appropriate to communicate information and observations.
28. CTE.HSMT.B.6.4 Employ sensitivity and withhold bias when communicating with patients.
29. CTE.HSMT.B.6.5 Report patient’s progress and response to treatment goals.
30. CTE.HSMT.B.6.6 Maintain written guidelines of the Health Insurance Portability and Accountability Act (HIPAA) in all communications.
31. CTE.HSMT.B.7.3 Document the patient findings and report information appropriately.
32. CTE.HSMT.B.8.5 Integrate proper body mechanics, ergonomics, safety equipment, and techniques to prevent personal injury to patients and clients.
33. CTE.HSMT.B.9.1 Know and implement practices to prevent injury and protect health for self and others.
34. CTE.HSMT.B.10.4 Demonstrate the use of appropriate personal protective equipment (PPE).
35. CTE.HSMT.B.10.6 Use various manual and mechanical decontamination and sterilization techniques and procedures.
36. CTE.HSMT.B.11.3 Adhere to the healthcare setting waste management program (e.g., recycling and reduction of regulated medical, solid, hazardous, chemical, and radioactive waste materials).
37. CTE.HSMT.B.12.1 Understand scope of practice and related skills within prevention, diagnosis, pathology, and treatment occupations.
Common Core Standards for Literacy in History/Social Studies, Science and Technical Subjects

Reading

1. RST.9-10.3 (9th and 10th) Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.
2. RST.11-12.3 (11th and 12th) Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
3. RST.9-10.9 (9th-10th) Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.
4. RST.11-12.9 (11th and 12th) Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Writing

1. WHST.9-10.4, WHST.11-12.4 (9-10 & 11-12) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

California Standards for Mathematical Practice

1. MP.1 Make sense of problems and persevere in solving them.
2. MP.2 Reason abstractly and quantitatively.
3. MP.4 Model with mathematics.
4. MP.6 Attend to precision.
5. MP.8 Look for and express regularity in repeated reasoning.
## Unit 1: Introduction to the Nursing Profession

### Description
The focus of this unit is to answer the question "What is nursing?" through exploratory activities and research. There are many nursing fields and different state-based laws that govern the scope of practice within nursing. By the end of this unit, students should understand the types of nurses that are present in a hospital setting. Additionally, the educational and training requirements for each nurse type should be explored.

### Intro to Nursing and Personal/Occupational Safety
By the end of this unit, students will be able to:
- Demonstrate procedures to be followed in the case of emergencies.
- Discuss ways to report a potential safety hazard to a supervisor.
- Identify and discuss cyber ethics, cyber safety, and cyber security.
- Identify common practices of maintaining resident confidentiality.
- Identify the various members of the health care team.

### Key Topics/Activities
- The methods of Universal /Standard Precautions that prevent the spread of microorganisms.
- The importance of CAL-OSHA.
- Proper body mechanics in order to prevent injury to patient and student.
- The effects of substance abuse in the workplace.
- The basic emergency codes used in a hospital and/or long-term care facility.
- Fire and Disaster plans as they relate to the patient care setting.
- The safe application of postural supports/restraints and define the legal and psychological implications of their use.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
### Unit 2: Patient Rights

**Description**
The focus of this unit is to understand the rights, roles, and expectations for patients in a patient care setting. An additional focus is on the relationship between the patient(s) and the provider(s). Students will learn to identify the signs of abuse and understand ethical concerns in the reporting process. By the end of this unit, students will be able to identify various patient rights including the role of ombudsman.

**Key Topics/Activities**
- The signs of abuse including: physical abuse, sexual abuse, emotional abuse, neglect, financial exploitation
- The nurse's role in reporting abuse
- The legal and ethical implications of reporting and not reporting

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

### Unit 3: Observation and Charting

**Description**
The focus of this unit is to understand the role of informational record keeping, informational safety, and informational dissemination in the patient care settings. Observations and charting are essential methods of recording patient data and students are expected to appreciate and understand the importance of this process. By the end of this unit, students will be able to demonstrate proper ADL flow sheet charting technique and demonstrate proper recording responsibilities by doing narrative charting.

**Key Topics/Activities**
- The definition of 'observation' and the list of senses used to observe a patient.
- Objective and subjective observations.
- The importance of the resident's care plan.
- The types of charting documents and use for each.
- Procedures to use when recording on a resident's chart.
- Proper use of medical terminology and accepted abbreviations in charting.
- Legal and ethical issues in charting.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
# Unit 4: Body Mechanics

## Description
The focus of this unit is for the student to understand the whole patient, not just the illness, sickness, or disease which brings them to a medical center. During the normal course of treatment, patients will often need moved or transported. Students are expected to become competent in physiological aspects of ambulation as well as anatomical aspects of patient care, comfort, and safety. By the end of this unit, students will be able to:

- Identify the purpose and rules of proper body mechanics.
- Demonstrate range of motion.
- Demonstrate a two person lift with a draw sheet.
- Demonstrate turning the resident in bed without lift sheet.
- Demonstrate placing person in lateral position.
- Demonstrate resident ambulation.
- Demonstrate positioning in wheelchair.
- Demonstrate transfer technique from bed to wheelchair with gait belt.

## Key Topics/Activities
- The dangers of bed rest and immobility.
- The proper use of gait belts.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
# Unit 5: Medical and Surgical Asepsis

## Description
The focus of this unit is to understand the infection control process as well as to understanding the proper use of hazardous chemicals. Students should become competent in blood-borne pathogens as well as the use of proper sterilization techniques. Students should be able to synthesize information regarding multiple causes of medical and surgical asepsis and how to prevent them. By the end of this unit, students will be able to demonstrate proper hand washing technique and methods of Universal/Standard precautions used in the prevention and spread of disease.

## Key Topics/Activities
- Common classifications of microorganisms and the diseases they cause.
- The six parts of the chain of infection.
- Basic signs and symptoms of an infection.
- The differences between contamination, asepsis, and sterile technique.
- Using Material Safety Data Sheets (MSDS) when handling hazardous chemicals.
- Transmission-based precautions and related terminology including isolation techniques.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
# Unit 6: Patient Care Skills and Procedures

## Description

The focus of this unit is to understand and demonstrate the essential aspects of patient care during the normal course of a hospital stay. This includes various health-related practices such as assisting patients with eating, drinking, sleeping, bathing, and other activities. By the end of this unit, students will be able to:

- Demonstrate safe bed bath and shower technique.
- Demonstrate proper technique in performing hygiene tasks including shaving, nail care and washing perineal area.
- Demonstrate technique for washing dentures.
- Identify signs, symptoms, and areas of the body prone to pressure ulcers, including measures used for prevention and treatment.
- Accurately measure and record intake and output.

## Key Topics/Activities

- Assisting a resident with care of personal clothing.
- Bed making procedures, including occupied and unoccupied bed.
- Dressing a resident with or without an IV or tubes.
- Methods used for weighing and measuring a resident.
- The normal and abnormal characteristics of urine and feces and common problems of elimination.
- The procedure for bowel and bladder training and correct documentation.
- The proper procedure for assisting a resident with bladder or bowel elimination; describe the care of an ostomy.
- The proper care, handling, and application of prostheses, including the insertion of a hearing aid.
- The various types of enemas and suppositories, including their purpose.
- The application and purpose of TED hose.
- The role of the Nursing Assistant in caring for residents with IV, urinary, and gastric tubing.
- Safe and proper placement of oxygen equipment, including a nasal, cannula and face mask.
- Application of a non-sterile dressing and non legend topical ointment.
- The proper technique for resident admission, transfer, and discharge according to facility policy.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
Unit 7: Vital Signs

Description
The focus of this unit is for students to understand and demonstrate proper identification and reporting procedures for vital signs (patient temperature, pulse, blood pressure, etc.). Additionally, students should be competent in their understanding of why the vital signs are important and how they identify health concerns. By the end of this unit, students will be able to demonstrate the correct procedure for measuring and recording a patient's temperature, pulse, respiration rate and recording a patient's blood pressure.

Key Topics/Activities
- Factors that influence the patient's vital signs including the normal and abnormal values.
- The five vital signs and the body functions measured by each.
- The equipment and methods used to obtain and record a patient's vital signs.
- The correct procedure for cleaning, disinfecting, and storing vital sign equipment.
- The ability to correctly define, spell, and pronounce vital sign key terminology.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).

Unit 8: Nutrition and Fluid Balance

Description
The focus of this unit is for students to understand the role of food, nutrition, fluids, and the dietary process in maintaining or developing patient health. Students are expected to understand the complex interaction of nutrition and personal health. By the end of this unit, students will be able to demonstrate proper feeding techniques and how to pass a dietary tray correctly.

Key Topics/Activities
- The signs and symptoms of choking.
- Common nutrients and food sources.
- The MyPlate food categorizations.
- The body's need for food and fluids.
- The special nutritional needs of the elderly.
- Normal and special diets commonly ordered for residents.
- Alternative ways to meet the residents' need for food and fluids including nasogastric and gastrostomy tubes.
- The use of feeding assistance devices.

Key concepts and skills will be assessed through written examination (multiple choice, short answer, and short constructed essay).
Unit 9: Rehabilitation/Restorative Care

Description
The focus of this unit is for students to understand the importance of normal physical activity and movement in the health of patients and be able to model proper patient care in regards to movement. By the end of this unit, students will be able to identify a nurse's role in preventing complications from inactivity.

Key Topics/Activities
- Rehabilitation (restorative care) and how it promotes independence and resident potential.
- State strategies to promote independence and resident's optimal potential in the rehabilitation.
- The members and purpose of the rehabilitation team.
- The ability to identify and assist the resident in activities of daily living (ADLs).
- Common comfort and adaptive devices and explain the purposes of each including hand rolls and splints.
- Procedures and devices used to promote mobility and ambulation for residents with physical and/or visual impairment.
- The relationship between the resident's self-esteem and family involvement in their care.

Unit 10: The Metric System, Weights and Measures

Description
The focus of this unit is for students to become competent in basic mathematical and measurement systems that are present in a patient care setting. Students should not only be able to identify the type of measurements necessary, but also be able to demonstrate proper measurement techniques and conversions when appropriate. By the end of this unit, students will be able to:
- Identify volume, length, and weight using the metric system and/or household measurements.
- Demonstrate obtaining a resident's weight.

Key Topics/Activities
- The units of measurement in the metric and household systems for weight, length, and liquid.
- Common measuring equipment and describe steps to accurately convert common measurements between the household and metric systems.
- Convert traditional time (Greenwich time) to military time.
Unit 11: Death and Dying

Description
The focus of this unit is for students to understand the end-of-life process, including the physiological, psychological, and sociological aspects of death as well as the administrative and legal aspects of caring for terminal patients. By the end of this unit, students will be able to identify the stages of grief and the signs of biological death.

Key Topics/Activities
● The stages of the grieving process defined by Kubler-Ross.
● The approaches used to meet common emotional and spiritual needs of the terminally ill resident and their family.
● The rights of the dying resident.
● The purpose of hospice care.
● The care and comfort measures for dying residents.
● The procedure for postmortem care.
● The role of Hospice in the care of the dying resident.

Unit 12: The Long Term Care Resident

Description
The focus of this unit is for students to understand the special needs for patients in long-term care facilities, especially in relation to elder care. By the end of this unit, students will be able to identify common changes due to the aging process, common diseases, disorders and their common signs and symptoms in the elderly.

Key Topics/Activities
● The psycho-social, spiritual, and recreational needs of the long term resident.
● The special care needs of residents with developmental disabilities and mental illness.
● Common community resources available for the needs of the elderly resident.
## Unit 13: Symposium Unit for Advanced Pre-Nursing Seminar

### Description

The emphasis of the final unit is on a full synthesis of the internship course content. Students will apply course content to their internship experience over the course of the year. These individual or small group projects will be presented in a public forum, with the intended audience being the hospital preceptors and industry representatives. Students should begin working on this early in the semester and will have dedicated time directly before the Symposium event as well.

### Key Topics/Activity

- Students will synthesize course content and internship experience and develop a presentation, poster, skit, or exhibit. This work will be presented at the annual Symposium event.