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|  | <p><b>School of Arts &amp; Science</b><br/> <b>BIOLOGY DEPARTMENT</b></p> <p><b>BIOL 252-1 to 6</b><br/> <b>Pathophysiology for Nursing 1</b><br/> <b>2007F</b></p> |
|---|---|

## COURSE OUTLINE

The Approved Course Description is available on the web @ \_\_\_\_\_

Ω Please note: this outline will be electronically stored for five (5) years only.  
It is strongly recommended students keep this outline for your records.

### 1. Instructor Information

|     |               |  |                    |  |
|-----|---------------|--|--------------------|--|
| (a) | Instructor:   | Ahmed Vawda, (Patty Foster, Darlaine Jantzen)        |                    |  |
| (b) | Office Hours: | M 12.30-2.30, W 11.30-12.30, 1.30-2.30, F 9.30-10.30 |                    |  |
| (c) | Location:     | F342D  |                    |  |
| (d) | Phone:        | 370-3479   | Alternative Phone: |  |
| (e) | Email:        | Vawda@camosun.bc.ca                                  |                    |  |
| (f) | Website:      |  |                    |  |

### 2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Upon completion of this course the student will be able to:

1. Explain basic concepts of disease processes.
2. With reference to endocrine, cardiovascular, and respiratory disorders, explain how and why normal physiology is altered in the pathogenesis of specific diseases.
3. Correlate disease with treatment and nursing management in one's patients.
4. Explain in lay terms the major features of a patient's disease to the patient.

### 3. Required Materials

(a) Texts

#### REQUIRED TEXTBOOKS

Porth, C.M. (2005). *Pathophysiology. Concepts of Altered Health States*. 7<sup>th</sup> ed. Lippincott Williams & Wilkins.

Day, R.A., Paul, P., Williams, B., Smeltzer, S.C. and Bare, B. (2007). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing, First Canadian Edition*. Lippincott Williams & Wilkins.

Lilley, L., Harrington, S., Snyder, J. and Swart, C. (2007). *Pharmacology and the Nursing Process in Canada*. 1<sup>st</sup> ed. Mosby.

Pillitteri, A. (2007). *Maternal and Child Health Nursing. Care of the Childbearing and Childrearing Family* 5<sup>th</sup> ed. Lippincott Williams & Wilkins.

Van Leeuwen, A.M., Kranpitz, T.R. and Smith. (2006). *Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications*. 2<sup>nd</sup> ed. F.A. Davis Company. Philadelphia.

(b) Other

#### 4. Course Content and Schedule

This is a tentative schedule of lectures. Changes may become necessary depending on progress in class.

| Week | Date                            | Lecture Topic  |
|------|---------------------------------|--|
| 1    | Sept 4 – 7                      | Foundational Concepts of Pathology   |
| 2    | Sept 10 – 14                    | Foundational Concepts of Pathology   |
| 3    | Sept 17 – 21                    | Foundational Concepts of Pathology   |
| 4    | Sept 24 – 28                    | Foundational Concepts of Pathology   |
| 5    | Oct 1 – 5<br><b>Oct 5</b>       | Endocrine Disorders<br><b>Final date for care plan assignment submission</b> |
| 6    | Oct 8<br>Oct 9 – 12             | Thanksgiving Holiday<br>Endocrine Disorders                                  |
| 7    | Oct 15 – 19<br><b>Oct 15</b>    | Endocrine Disorders<br><b>Midterm Exam (08h30 – 10h20)</b>                   |
| 8    | Oct 22 – 26                     | Cardiovascular Disorders   |
| 9    | Oct 29 - Nov 2<br><b>Oct 29</b> | Cardiovascular Disorders<br><b>Final date for client profile submission</b>  |
| 10   | Nov 5 – 9                       | Cardiovascular Disorders   |
| 11   | Nov 12<br>Nov 13 – 16           | Remembrance Day Holiday<br>Cardiovascular Disorders                          |

|    |             |                              |
|----|-------------|------------------------------|
| 12 | Nov 19 – 23 | <i>Respiratory Disorders</i> |
| 13 | Nov 26 – 30 | Respiratory Disorders        |
| 14 | Dec 3 – 7   | Respiratory Disorders        |
|    | Dec 10 – 18 | Final Examination            |

### 5. Basis of Student Assessment (Weighting)

*(Should be linked directly to learning outcomes.)*

|  |     |
|--|-----|
| Midterm exam ( <b>Monday, Oct 15; 08h30 to 10h20</b> ) | 35% |
| Care plan assignment                                   | 5%  |
| Client profile   | 15% |
| Comprehensive final exam (college exam period)         | 45% |

### 6. Grading System

*(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)*

#### Standard Grading System (GPA)

| Percentage | Grade | Description   | Grade Point Equivalency |
|------------|-------|---|-------------------------|
| 90-100     | A+    |   | 9                       |
| 85-89      | A     |   | 8                       |
| 80-84      | A-    |   | 7                       |
| 77-79      | B+    |   | 6                       |
| 73-76      | B     |   | 5                       |
| 70-72      | B-    |   | 4                       |
| 65-69      | C+    |   | 3                       |
| 60-64      | C     |   | 2                       |
| 50-59      | D     | Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite. | 1                       |
| 0-49       | F     | Minimum level has not been achieved.  | 0                       |

#### Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at [camosun.ca](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary Grade | Description  |
|-----------------|--|
| I               | <i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.  |
| IP              | <i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. <i>(For these courses a final grade will be assigned to either the 3<sup>rd</sup> course attempt or at the point of course completion.)</i> |
| CW              | <i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.  |

**7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course**

**LEARNING SUPPORT AND SERVICES FOR STUDENTS**

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at [camosun.ca](http://camosun.ca).

**STUDENT CONDUCT POLICY**

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

**COURSE CONTENT**

**Foundational Concepts of Pathology**

Introductory terminology (additional terms as the course progresses)

Cell injury

Inflammation

Abnormal immune responses

Neoplasia

Congenital and genetic disorders

Fluid-electrolyte and acid-base imbalances

**Review** from year 1:

fluid compartments & distribution within

electrolytes & their functions

transcapillary exchange

**Endocrine Disorders**

**Pancreas**

Diabetes mellitus (Type 1 & 2)

Acute complications

DKA

hyperosmolar hyperglycemic state

hypoglycemia

Chronic complications

vascular damage

atherosclerosis, MI, CVA

nephropathy

neuropathy

retinopathy

infections

**Thyroid gland**

Hyperthyroidism

Grave's disease

thyrotoxicosis

Hypothyroidism

myxedema

cretinism

.....  
Hashimoto's thyroiditis

Adrenal gland

- Adrenocortical hyperfunction
  - Cushing's syndrome
  - Conn syndrome
- Adrenocortical insufficiency
  - Addison's disease

Pituitary gland

- Hyperpituitarism
  - hyperprolactinemia
  - GH hypersecretion
    - gigantism
    - acromegaly
  - SIADH
- Hypopituitarism
  - hypoprolactinemia
  - diabetes insipidus

**Cardiovascular Disorders**

Disorders of blood vessels and pressure

- atherosclerosis
- peripheral vascular disease

Diseases of the heart

- angina pectoris
- myocardial infarction
- cardiomyopathy
- arrythmias
- valvular disease
- Infectious, inflammatory and immunologic disorders
  - endocarditis
  - rheumatic heart disease
- Congestive heart failure

Pericardial disorders

- pericarditis
- cardiac tamponade

- leukemia
- lymphoma ~~Leukemia~~
- Lymphoma (self study)

Anemia

- ..... Disseminate
- dLymphatic disorders (self study)
- Hemorrhagic disorders

**disseminated** intravascular coagulation (**self study**)

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### Respiratory Disorders

Chronic obstructive pulmonary disease (COPD)

asthma

chronicChronic bronchitis

emphysema

Disorders of lung inflation

atelectasis

pleural effusion

Pulmonary vascular disorders

pulmonary edema

pulmonary embolism

pulmonary hypertension

acute respiratory distress syndrome (ARDS)

Respiratory failure

Respiratory tract infections

the common cold and rhinosinusitis (self-study)

influenza

pneumonia

pulmonary tuberculosis (self-study)

Emphysema

Asthma

Sinusitis, pharyngitis, tonsillitis, rhinitis, laryngitis (self-study)

Lung cancer

Atelectasis

Pleural effusion

Pulmonary edema

Acute respiratory failure

Adult (Acute) Respiratory Distress Syndrome (ARDS)

Pulmonary embolism

Pulmonary hypertension

Chest wall configuration and deformities (self-study)

Cystic fibrosis

Influenza

Pneumonia

Pulmonary tuberculosis (self-study)

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**\*\* Information on self-study topics can be found in your textbook. Scan the index for the appropriate pages. Guidance on how to approach each self-study topic will be posted on the course website.**

## Nursing Applications Component of the Course

### 1. General Information

Lectures are content-laden and held once a week for only 50 minutes. It is imperative that you come to class prepared to optimize this learning opportunity and to prepare you to provide informed care for your clients in Nursing Practice.

- Preparation for class: “**Focus Points**” about class material (in outline format) will be available weekly on the course website. Topics are listed on the Semester Overview handed out in week 1. It is important to prepare for each class by reviewing normal Anatomy and Physiology from Year 1 and appropriate information about the topic in your Medical-Surgical, Pharmacology, Laboratory and Diagnostic textbooks and reading the applicable Nursing Journal article before class. Journal articles will be made available for each topic on E-reserve through the Camosun Library.
- Class participation:
  - Reflect on your nursing practice experience related to the topic for discussion and come prepared to contribute to the class discussion and to ask questions.
  - Be prepared to take notes. The Learning Center provides a valuable “Note-taking, note-making” session during the first week of the semester.
- After class, spend time reviewing your preparation (preview) notes, additional notes made in class, and the professional journal article related to the topic.

### 2. Care Plan Assignment:

- This assignment is worth **5%** of the total course mark.
- **Due Date: October 5, 2007** (may be submitted earlier)
- Extensions will not be granted
- This assignment will be returned before your Client Profile is due
- See attached document for details and guidance for doing this assignment
- Students not registered in Seminar will be expected to attend a **Seminar class in Week 2** to access the content material about planning care.

### 3. Client Profile Assignment:

- This assignment is worth **15%** of the total course mark.
- **Due Date: October 29, 2007** (Papers may be submitted earlier)
- See attached document for details and criteria for this assignment

Due to the large number of students in the course and the excessive volume of marking, extensions will not be granted and re-reads will not be done. Ask your questions before you submit your paper. All papers will be returned by the first week in December.

**Students not in Nursing Practice will consult with the Instructor regarding the Care Plan and Client Profile Assignments. You will be assigned to a Nursing Practice Teacher on a unit.**



- **Current CRNBC student membership is required.**
- **You must have a VIHA Confidentiality form on file.**

**Nursing Applications Care Plan Assignment**  
**Due Date: Friday, October 5, 2007 (by 1600 hours)**

This assignment will consist of a complete plan of care for the client you have chosen. All systems must be included as well as Psychosocial and Spirituality.

**Criteria for this assignment** (4 pages maximum)

- One page will provide a description of the health challenge that brought the client to the acute care setting.
- Your care plan must reflect care related to this health challenge. If a system does not appear to be directly involved, that may be seen as a Strength rather than a Problem or Need. This portion must not exceed 3 - 4 pages and may be submitted in table or point form.
- All aspects of the *Decision Making for Nursing Practice Framework* or *Nursing Process* for each 'system' must be included as indicated in your preparation reading. An example of how this may look is included as a Word document so you can move the lines around, type in a small font size (for example). Work must be typed.

**Marking Criteria** (Mark constitutes 5% of Total Biology Mark)

- **15%** Description of Health Challenge for this Client which will include a brief history
- **35%** Evidence of understanding of application of *Decision Making for Nursing Practice Framework/Nursing Process*
- **50%** Includes all aspects of required care for this client related to his/her health challenge
- There will be a **2% per day deduction** for late assignments.

It will be important for you to prepare for this assignment by reading and understanding the following information. This preparation will help

- to build on your current knowledge
- to interpret the information in your text books
- to begin to organize the sometimes overwhelming amount of information in the practice setting when planning care for your clients

**Resources/Readings**

- Review the *Decision Making for Nursing Practice Framework* (will be referred to as **Framework**) from Nursing 120B Nursing Practice II and Nursing 121 CPE 1 (included in this package)
- Review your Seminar material in relation to research and planning your client's care

### **The Nursing Process** (terminology in your textbooks)

- Overview: Kozier and Erb (K&E) pp. 387-390
- Assessing
  - K&E pp. 391-404 (you will find that much of this is review from Year 1)
  - *Framework: Coming to Know the Client and Salience/Pattern Recognition (Ways of Knowing)*
- Determining Problem, Need, Strength (Nursing Diagnoses)
  - *Framework: Health Issues/Healing Initiatives*
- Planning/Outcomes
  - K&E pp.415-416, page 419 (Guidelines for Writing Nursing Care Plans), page 420-425 (The Planning Process)
  - *Framework: Health Issues/Healing Initiatives*
- Implementation of Plan/Nursing Interventions
  - K&E pp. 424-427
  - *Framework: Critical Reflection/Praxis (reflection and action)*
- Evaluation
  - K&E pp. 433 (bottom) – 438
  - *Framework: Critical Reflection/Praxis (Possibilities for change; Constantly evolving process)*

### **Other required readings:**

- Cauthorne-Burnette & Estes
  - Chapter 1 The Nursing Process
  - Chapter 2 The Patient Interview
- Lilley, Harrington & Snyder
  - Chapter 1 The Nursing Process and Drug Therapy
- Brunner and Suddarth (Day et al)
  - Pages: 21-24, 31-40

\*\*\*Students not in Nursing Practice must do this reading before going onto the unit with the Nursing Practice instructors to whom you have been assigned.

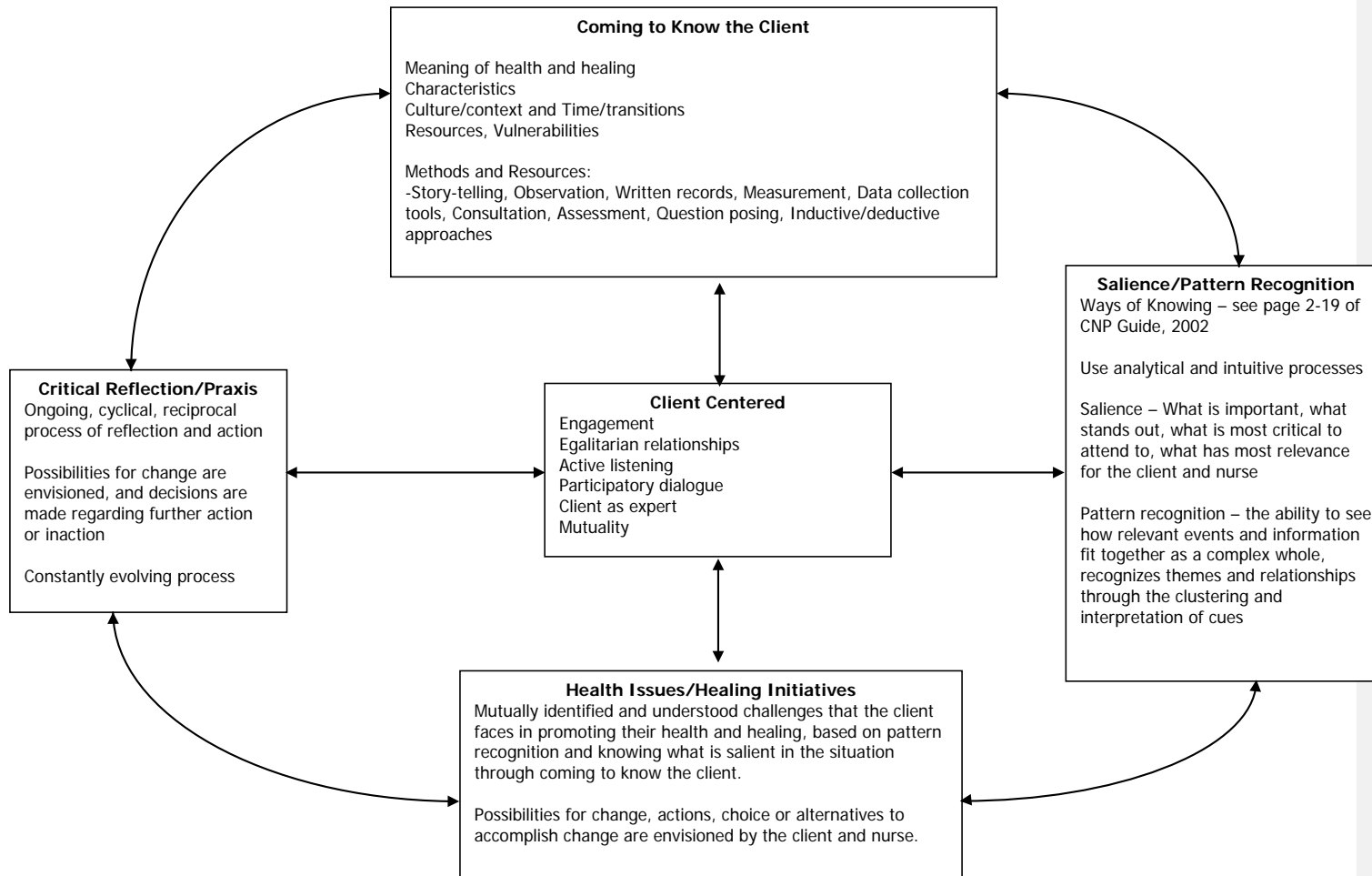
**Example:**

Pseudonym: \_\_\_\_\_ AGE: \_\_\_\_\_ SEX: \_\_\_\_\_ Allergies \_\_\_\_\_

Advanced Directive \_\_\_\_\_

Admission Diagnosis: \_\_\_\_\_

|   | <b>ASSESSMENT/DATA<br/>COLLECTION</b><br>(Includes Lab &<br>Diagnostics)<br><i>Coming to know the Client</i> | <b>PROBLEM, NEED,<br/>STRENGTH</b><br>(Nursing Dx)<br><i>Health Issues/<br/>Healing Initiatives</i> | <b>PLANNING/GOALS</b><br>(Client centered)<br><i>Health Issues/<br/>Healing Initiatives</i> | <b>IMPLEMENTATION</b><br><b>CLIENT CARE/MEDS/TREATMENTS</b><br><i>Critical Reflection/Praxis</i> | <b>EVALUATION</b><br>(Was the goal achieved?)<br>No? Reassess<br><i>Possibilities for change</i> |
|---|--|---|---|--|--|
| Psychosocial/Spiritual                  |  |   |   |  |  |
| Respiratory                             |  |   |   |  |  |
| Circulation                             |  |   |   |  |  |
| Central Nervous<br>System -neurological |  |   |   |  |  |
| Nutrition                               |  |   |   |  |  |
| Elimination                             |  |   |   |  |  |
| Skin/Wound Hygiene                      |  |   |   |  |  |
| Mobility                                |  |   |   |  |  |
| Sleep/Rest                              |  |   |   |  |  |
| Comfort/<br>Safety                      |  |   |   |  |  |



**Client Profile Assignment**  
**Due Date: October 29, 2007**

The Client Profile provides a learning opportunity to relate theory from all of your courses to health challenges that you are observing in the client population in your Nursing Practice area. Client profiles are based on a client for whom you have done research and provided care during your nursing practice.

**APA Guidelines** must be utilized.

- Information regarding APA Guidelines is available via the Internet and in the college library and Learning Center. Refer to your APA Publication Manual that you purchased in Year 1. It will be a valuable resource for the remainder of your nursing education.
- Amongst other criteria, APA Guidelines include spelling, punctuation, grammar, sentence structure, and referencing requirements. Remember - font size is 12.
- *Charts and/or tables may be utilized in the body of the text or can be added as appendices as per APA Guidelines. Review use of appendices.*
- Must be **no longer than 10 pages and not less than 8 pages** (this includes the Title page and the References page). **If you fail to comply with page length, it will impact your overall mark.**
- **References** - In addition to textbook references, you must cite at least two Nursing Journal articles. Refer to the Camosun College Library for information about access to and designation of articles from Nursing Journals.

**Remove all information that would jeopardize client confidentiality.** (Use a pseudonym for identification of your client and do not include specific names of towns, cities, islands, or care facilities or actual names of caregivers e.g. physicians.)

**Note:** It is not permitted to make photocopies of information from the client's Health Record (the chart).

*Use only Approved Abbreviations from the VIHA Recording Manual.*

**Introduction:**

**The purpose of this section is to introduce your reader to the topic of your paper, in this case a particular patient with a/some particular health care challenge/s.**

- Pseudonym, age, gender, allergies, advanced directives.
- Admission diagnosis and symptoms (presentation).
- Client understanding of the reason for admission.
- Brief health history that relates to the present admission.
- Social history as it relates to the present admission.
- Members of the health care team involved in the care of this client (by occupation, not name). What care did these professionals provide for this client?

### “Patho Links”

The purpose of this section is to comprehensively discuss the health care challenge, including etiology, pathophysiology, symptoms, investigation (lab and diagnostic tests) and common treatments - to link the client with the health care challenge.

Explore the following relationships:

- Presenting diagnoses (e.g., diabetes and below knee amputation)
- Diagnostic procedures (on the unit and off), laboratory tests, treatments, procedures, OR's, etc. and what the diagnostic and laboratory tests tell us about this client's health status
- Impact of Medications and treatments on this client's health status. List the medications and describe their classification and modes of action as they relate to this client. Why is this client receiving this medication?
- Include nursing implications for administration of these medications.
- Describe rationale for these treatment and medication choices from the pathophysiological perspective. Are these interventions effective or not? What evidence is there of this?

### Nursing Implications:

You must demonstrate your nursing knowledge and the nursing application of pathophysiology.

- What nursing **assessments** were performed for this client? What did you observe? Based on your assessment findings, what **problem, need, strength** emerged? What did you learn when interviewing this person?
- What client -centered **planning** was indicated for optimal care of this client? Why? Identify potential risks for this client.
- What **interventions** were done in response to the assessment findings and problems, needs, strengths?
- Were the interventions effective (**Evaluation**)? How did you determine this? Was another plan required?

Assessment-----Problem/Need/Strength-----Planning-----Intervention-----  
Evaluation

### Conclusion:

Considering the above findings, was the best medical and nursing care provided for your client? What do you think the outcome will be for this client? What role do you see yourself having as a client advocate for “best practice” care for this client?

**Notes:**

Updated examples of Client Profiles are available in the [Learning Center](#). Ask at the desk for directions to these examples. These cannot be removed or copied.

Do not hesitate to contact your Instructor if you have any questions about the assignment or course content.

***Marking Criteria: (2% per day deduction for late assignments)***

Marking criteria for the client profile are available on the course website. A 'grade' designation for "What Constitutes an 'A, B, C, D' Paper" will be available on the website (University of Victoria marking guideline).

**ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED**