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|  | <p>School of Arts & Science BIOLOGY DEPARTMENT</p> <p>BIOL 252-0405 Pathophysiology for Nursing 1 2006F</p> |
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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: | Dr. Ahmed Vawda and Patty Foster RN, BSN, MN(c) | | |
| (b) | Office Hours: | | | |
| (c) | Location: | F 342D and F 256A | | |
| (d) | Phone: | 370-3479 and 370-3268 | Alternative Phone: | |
| (e) | Email: | vawda@camosun.bc.ca fosterp@camosun.bc.ca | | |
| (f) | Website: | http://vawda.disted.camosun.bc.ca | | |

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, neurological, cardiovascular, congenital and genetic 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 | <p>Black, J.M.& Hawks, J.H. (2005). <i>Medical-Surgical Nursing: Clinical Management for Positive Outcomes</i> (7th ed., 2 volume set). Elsevier Saunders, St Louis.</p> <p>Lilley, L., Harrington, S., Snyder, J. and Swart, C. (2007). <i>Pharmacology and the Nursing Process in Canada</i>. (1st ed). Mosby.</p> <p>Cauthorne-Burnette, T and Estes, M.Z. (2002). Clinical companion to accompany health assessment and physical examination. (2nd ed). New York: Delmar Publishers.</p> <p>Pillitteri, A. (2007). <i>Maternal and Child Health Nursing. Care of the Childbearing and Childrearing Family</i> (5th ed). Lippincott, Philadelphia.</p> <p>Van Leeuwen, A.M., Kranpitz, T.R. and Smith. (2006). <i>Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications</i>. (2nd ed). F.A. Davis Company. Philadelphia.</p> <p>Optional text Porth, C.M. (2005). <i>Pathophysiology. Concepts of Altered Health States</i> (7th ed). Lippincott, Philadelphia.</p> |
| (b) | Other | <p>http://pharmacology.disted.camosun.bc.ca (further details are available from your nursing Instructor).</p> |

4. Course Content and Schedule

(Can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

The following is a **tentative** schedule of lectures. Minor changes may become necessary depending on progress in class.

| Week | Date | Lecture Topic |
|------|--------------------------------|--|
| 1 | Sept 5 – 8 | Basic Concepts of pathology |
| 2 | Sept 11 – 15 | Basic Concepts of pathology |
| 3 | Sept 18 – 22 | Basic Concepts of pathology |
| 4 | Sept 25 – 29 Sept 29 | Basic Concepts of pathology Final date for care plan assignment submission |
| 5 | Oct 2 – 6 | Endocrine Disorders |
| 6 | Oct 9 Oct 10 – 13 | Thanksgiving Endocrine Disorders |
| 7 | Oct 16 – 20 | Endocrine Disorders |

| | Oct 16 | Midterm Exam (1730 – 1900) F100 & Y216 |
|----|----------------------|---|
| 8 | Oct 23 – 27 | Cardiovascular Disorders |
| 9 | Oct 30 - Nov 3 | Cardiovascular Disorders |
| 10 | Nov 6 – 10 Nov 13 | Cardiovascular Disorders Remembrance Day |
| 11 | Nov 14 – 17 | Cardiovascular Disorders |
| 12 | Nov 20 – 24 | <i>Respiratory Disorders</i> |
| 13 | Nov 27 – Dec 1 | Respiratory Disorders |
| 14 | Dec 4 – 8 | Respiratory Disorders |
| | Dec 11 – 19 | Final Examination |

COURSE CONTENT

Basic Concepts of Pathology

- Terminology
- Cellular injury
- Inflammation
- Healing (**self study**)
 - Proliferation / resolution
 - Maturation / reconstruction
- Abnormal immune responses
- Neoplasia
- Congenital and genetic disorders
- Fluid-electrolyte and acid-base imbalances

Endocrine Disorders

Pancreas

- Diabetes mellitus
 - Acute complications
 - Chronic complications

Thyroid gland

- Hyperthyroidism
- Hypothyroidism

Adrenal gland

- Adrenocortical insufficiency
- Adrenocortical hyperfunction

Pituitary gland

- Hyperpituitarism
- Hypopituitarism

Cardiovascular System

- Angina
- Myocardial infarction
- Peripheral vascular disease
 - Leukemia
 - Lymphoma (**self study**)

Infection

- Rheumatic fever
- Endocarditis
- Pericarditis
- Heart failure
- Cardiomyopathy
- Arrhythmias
- Aneurysms
- Valvular disease
- Anemia

Lymphatic disorders (**self study**)
Cardiac tamponade
Hemorrhagic disorders
Disseminated intravascular coagulation (**self study**)

RESPIRATORY DISORDERS

Chronic obstructive pulmonary disease (COPD)
Chronic bronchitis
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**)

**** Self-study topics can be found in your text book (Black & Hawks). Scan the index for the appropriate pages. Guidance on how to approach each self-study topic will be provided on the course website.**

Nursing Applications ~~Class Information and Assignments~~ Component of the Course

1. General Information – ~~Expectations for Nursing Applications Class:~~

~~Attendance in class~~ Attending lectures is critical as ~~all~~ information presented in class is essential necessary for informed care of clients ~~that you will encounter in~~ during clinical practice. ~~The material~~ The material is also examinable.

~~This class is a~~ Lectures are content-laden ~~class and held~~ each once a week for only 50 minutes. It is imperative ~~to~~ that you come prepared to class and optimize your learning. This also helps to reduce stress levels ~~and reduce your stress level~~.

- Preparation for class: **“Focus Points”** on class material (in ~~the~~ outline format) ~~that~~ will be ~~utilized to present the class material will be~~ available weekly on the course website, ~~the week before each class~~. Topics are listed on the Semester Overview that will be handed out in week 1. It ~~is will be~~ important to prepare for ~~the each~~ class ~~through review of by reviewing appropriate information on the topic to be covered in your~~ Anatomy and Physiology, ~~of the system being discussed and readings from your Physiology text, Pharmacology, text, Physical Assessment text, and Laboratory and Diagnostic~~ textbooks before class. ~~Tests book related to the topic.~~
- Class participation:
 - Reflect on your nursing practice experience related to the topic for discussion and come prepared to contribute to the class discussion or 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.
 - ~~Access for a~~ Nursing Journal article will be made available for each topic ~~on the Biology 252 website or~~ on E-reserve through the Camosun Library. Information on the article will be posted weekly on the Biol 252 website.
- After ~~the~~ class, spend time reviewing your preparation (preview) notes, ~~the~~ notes ~~that you~~ made in class, and the Nursing Journal article related to the topic. ~~about that~~

2. Care Plan Assignment

- This assignment is worth 5% of the total course mark.
- Due Date: September 29, 2006.
- The assignment provides an opportunity to interview your client, ~~and~~ review a client’s health record in the practice setting and extract necessary information to plan nursing care for him/her. The plan must related to the main reason for the client’s admission ~~that this person was admitted~~ to the acute care practice setting.
- Focus will be on conciseness, ~~and~~ accuracy of information and evidence-based nursing care.

- [Criteria for Format of](#) the assignment and marking criteria will be discussed during [week 1. Orientation Week.](#)

3. Client Profile Assignment:

- This assignment is worth 15% of the total course mark.
- Due Date: self-selected schedule as per roster (developed during [Orientation week 1](#)). [Due to the large](#) number of students in the course [and the excessive volume of marking.](#) ~~Extensions will not be granted- and R~~re-reads will not be done. Ask your questions before you submit your paper.

The Client Profile provides a learning opportunity to relate classroom theory to health challenges that you are observing in the client population in your nursing practice area. Client profiles are based on a client that you provided care for during your nursing practice.

Students not in Nursing Practice must consult the [i](#)nstructor regarding the Client Profile

Client Profile Format

Note: It is not permitted to make photocopies of information from Client Health Records (the chart).

APA Guidelines must be utilized.

- Information re: APA Guidelines is available via the Internet and in the college library and Learning Center. It is possible to purchase an APA textbook [and this which](#) would be a useful resource for the remainder of your nursing education.
- The APA Guidelines include spelling, grammar and references.
- *Use only Approved Abbreviations from the VIHA Recording Manual.*
- *Charts and/or tables may be located in the body of the text or can be added as appendices as per APA Guidelines.*
- Must be [no longer than 10 pages and not less than 8 pages](#) (this includes the Title page and the References page. [More Extra](#) pages will not be read [which would and this will](#) impact the overall mark as the conclusion would not be included in the final marking). [Must be no less than](#)
- [8 pages.](#) References must include three professional journal articles (two of these must be from Nursing Journals) [as well as in addition to](#) your textbook references.

Remove all information that would jeopardize client confidentiality.
(Use a pseudonym only.)

Introduction:

- 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 (e.g., person in highly stressful occupation admitted with myocardial infarction, person with IV substance [ab](#)use issues admitted with sepsis).
- Members of the health care team involved in the care of the patient (by occupation, not name). What care did these professionals provide for this client?

Body:

- Description of the client's health challenge(s) utilizing [pathophysiology](#) [clinical](#) terminology. Focus on one or two of the client's most significant challenges. Other challenges must be listed and a statement made indicating how these relate to the condition(s) being discussed.
- **"Patho Links"** – Explore the [following](#) relationships [between](#):
 - 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 the client's health status
 - Impact of Medications and treatments on the client's health status. List the medications and describe their classification and modes of action as they relate to this client. Include nursing implications for 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:

- What nursing **assessments** were performed for this client? What did you observe? What did you learn when interviewing this person?
- What nursing care **planning** was indicated for optimal care of this client? Why?
- What **interventions** were done in response to the assessment findings?
- Were the interventions effective (**Evaluation**)? How did you determine this? Was another plan required?
- Relate this plan to the pathology occurring [in](#) this client as evidenced by signs and symptoms, laboratory results and results of diagnostic procedures.

Assessment-----Planning-----Intervention-----Evaluation

Conclusion:

Considering your findings above, were the [correct](#) things being done 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

Examples of Client Profiles [are](#) available in the [Learning Center](#). Ask at the desk for directions to these examples.

Do not hesitate to contact your [instructor](#) if you have any questions about the assignment or course content.

Marking criteria [for the client profile](#) will be provided during [Orientation](#) week [1](#).

5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

| | | | |
|-----|---|--|-----|
| (a) | Assignments | Care plan assignment | 5% |
| (b) | Quizzes | | |
| (c) | Exams | Midterm exam (Monday, Oct 16; 1730 to 1900) | 35% |
| | | Comprehensive final exam (college exam period) | 45% |
| (d) | Other <small>(eg, Attendance, Project, Group Work)</small> | Client profile | 15% |

Tests and examinations will integrate both the pathology and nursing components of the course. However, the overall weighting will reflect the disparity in number of lectures for each component. While some examination questions will require return of factual information, others will involve interpretation and assimilation of clinical information often based on clinical scenarios. If you wish to practice working through clinical scenarios, refer to the CD ROM accompanying your text book (Black & Hawks).

Examinations must be written at the specified date and time, unless there is a medical or other emergency that prevents you from doing so. **You must notify the instructor before the examination and submit a doctor's note that indicates the doctor's evaluation that you were unable to write the examination. Your attention is specifically drawn to the examination policy in the College calendar (page 35) which states that exams must be written at the scheduled time except in cases of emergencies. Exams will NOT be deferred for holidays or scheduled flights.**

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 |
|------------|-------|--------------------------------------|-------------------------|
| 95-100 | A+ | | 9 |
| 90-94 | A | | 8 |
| 85-89 | A- | | 7 |
| 80-84 | B+ | | 6 |
| 75-79 | B | | 5 |
| 70-74 | B- | | 4 |
| 65-69 | C+ | | 3 |
| 60-64 | C | | 2 |
| 50-59 | D | | 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 at camosun.ca or 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course. |
| 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. |

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 for information on conversion to final grades, and for additional information on student record and transcript notations.

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.

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.

Although the pass mark for Biology 252 is 60%, in order to continue in the nursing program, you must maintain a cumulative GPA of at least C+.

As a learning and evaluation tool, a care plan assignment and a client profile assignment will be used to link the pathology and nursing components of the course. These will contribute 5% and 15% respectively to the final course mark. See the information below for details on these assignments.

ASSIGNMENT SUBMISSION DATES

Care plan September, 29
Group profile weekly through the term as per roster
Details will be provided in the first nursing application class.

You are encouraged to consult the Instructors if you require assistance or experience difficulty with the course. Don't wait until just before an examination.

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difficulty with the course. Don't wait until just before an examination.

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For success in this course, it is essential to have a good understanding of physiology and the associated anatomy of the organ systems being taught as this forms the basis for studying pathophysiology. There will be no time to review or re-teach this in class. If necessary, you must review this information on your own.

During the course, you will obtain information from several sources including lectures, class discussions, textbooks, client profiles, current journal articles and clinical practice. Do not rely exclusively on any one, or only some, of these sources. Attending lectures is very strongly recommended and is essential for success in this course. Relying on class notes obtained from a colleague or through other means, will generally NOT ensure success in this course. This course outline lists the various topics that will be studied. You are encouraged to review these topics in the textbook before classes and to consolidate information obtained in lectures with that in the textbook after each class. **Some of the topics involve self-study (indicated in the outline) and will not be covered in lectures. Self-study topics are the student's responsibility and are examinable.** All required information on self-study topics is available in your textbooks.

Students often find this course challenging in the initial stages, because it is both content and concept driven. In addition, the course involves skills that some may not be experienced in e.g. critical thinking, problem solving, integrating and assimilating information, and working with clinical scenarios. Since these skills develop with experience, applying them regularly to course content is important. Your text book (Black & Hawks) is a good resource for clinical scenarios. Refer to the CD ROM and Evolve website accompanying the book.

Wherever possible, establish the following standard format for each disease that you study:

- a brief introduction to the disease (e.g. degenerative neurological disorder)
- etiology
- pathology
- major manifestations (don't include an exhaustive list)
- diagnosis
- treatment / management

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Here are some Do's and Don'ts to assist you in completing the course successfully:

Do

- attend lectures regularly and **understand** what is being discussed
- read up on each topic before class and consolidate lecture notes with information from the textbook after each before the next class
- keep abreast of the course by working through course material as the course progresses
- pay particular attention to basic concepts and foundational information
- take responsibility for your own learning
- consult the Instructor if you experience difficulty with the course
- maximize your marks for the nursing applications assignments as these are written under non-exam conditions
- learn how to process information from clinical scenarios
- develop and use a time management plan

Don't

- let course material accumulate expecting to work through it just before an exam – you will be overwhelmed
- memorize information, especially if you don't understand the material
- expect to be “spoon-fed” or “coached” to pass examinations

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