HINF 280 (A01) BIOMEDICAL FUNDAMENTALS CRN 21785	
TERM	**SPRING 2023**
CLASS TIMES	**MONDAYS & WEDNESDAYS, 5:30PM – 6:50PM PT**
CLASS LOCATION	**CORNETT BUILDING B143**
INSTRUCTOR	**ERDEM YAZGANOGLU**
OFFICE HOURS	**BEFORE AND AFTER CLASS AND BY APPOINTMENT**
TELEPHONE	**250 812 1513**
E-MAIL	yazganog@uvic.ca
LEARNING TECHNICAL SUPPORT	UVIC COMPUTER HELP DESK EMAIL helpdesk@uvic.ca FOR ZOOM, BRIGHTSPACE, AND OTHER TECHNOLOGIES TELEPHONE: 250-721-7687 OR TOLL-FREE 1-844-721-7687 • 8AM TO 11PM (PACIFIC) ON MONDAY-FRIDAY • 10AM TO 10PM (PACIFIC) ON SATURDAY & SUNDAY • 10AM TO 6PM (PACIFIC) ON STATUTORY HOLIDAYS FOR OTHER ISSUES CONTACT ltsisupport@uvic.ca
ONLINE LEARNING TOOLS	LEARN ANYWHERE ONLINE RESOURCES GET TO KNOW YOUR ONLINE TOOLS ZOOM ORIENTATION GUIDE

TERRITORY AKNOWLEDGEMENT

First Peoples House
We acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

OVERVIEW

The objective of this course is to provide the student with an overview of the anatomy, physiology of human body and selected examples of pathology - fundamentals required for understanding future studies in health informatics. The course develops familiarity with medical terms, and creates an understanding of measurement of normal and abnormal, preparing Health Information students for practice in clinical field. All integrated functions of physiological systems are covered, including psychiatric problems.

COURSE DESCRIPTION

Presents the principles of biochemistry, organ physiology and selected examples of pathology in order to provide the fundamentals required for understanding in future studies. All body systems are briefly reviewed and discussions of medical case studies are conducted.

Health informaticians have an important role in helping to coordinate and communicate health information to support consumers and health professionals: information needs, learning, decision-making, and practice at point of care. The distinctive competence of a health information science graduate is their familiarity of the health care terminology and organizational structure. In order to develop a base understanding of the use of health information by consumers and health professionals. Health informaticians need to understand key aspects of human anatomy, physiology and the human body's response to health and disease.

This course aims to develop an understanding of the key concepts and types of information that health professionals utilize in their search for and use of information in decision-making when they are caring for patients or communities. This course also prepares the baseline information for the other courses in the program such as Epidemiology and Medical Methodologies.

COURSE AND LEARNING OBJECTIVES

- Understand basic anatomic and medical terminology used in health care settings and essential aspects of human physiology its relationship to health and disease.
- To become familiar with and understand the relevance of anatomy and physiology and the states of human health and disease in the effective development and evaluation of health information.

PREREQUISITES AND COREQUISITES

One of Biology 12, BIOC 102, BIOL 150A, BIOL 150B, BIOL 186, EPHE 141.

READINGS

Textbook:
Books: Cohen, B. J. (2012) Memmler's: The human body in health and disease (13th ed,). Wolters Kluwer: New York. 12th or 11th editions are also acceptable

FORMAT

Except the first week, Each Monday session is dedicated on general overview of a system and each Wednesday is dedicated to review the general information through a case study.

Students are expected to have read the case studies, at the minimum, and suggested book chapters prior to the session. Please follow Brightspace for announcements and additional course materials.

Students are encouraged to contribute to learning environment through voluntary participation such as presentations, leading and facilitating discussions, and bringing interesting topics. Please contact the instructor, if you are interested, to align your interests with course objectives, assignment topics and scheduling.

MARK BREAKDOWN

ALL ASSIGNMENTS WILL BE SUBMITTED WITH ONLY STUDENT'S NUMBER.

Mark Breakdown

Average of 12 quizzes (1)	15%
Chronic disease assignment (2)	25%
Acute Disease Assignment (3) or information system design (4)	20%
Case study response homework (5)	20%
Oral assessment (5)	20%
TOTAL	100%

Please check Learning Management System (Brightspace) for Due Dates.

All major tests and assignments must be completed to pass the course. HINF Undergraduate Academic Policy stipulates for late assignments that a penalty of 5% for each of first three days and each day thereafter of 20% will be assessed

Please refer to the end of this course outline for assignment requirements, group work and marking scheme.

I reserve the right to use plagiarism detection software or other platforms to assess the integrity of student work.

SCHEDULE AT A GLANCE

Please refer to the end of this course outline.

COURSE EXPERIENCE SURVEY

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to your CES dashboard at ces.uvic.ca. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. I will remind you nearer the time but please be thinking about this important activity, especially the following three questions, during the course.

1. What strengths did your **instructor** demonstrate that helped you learn in this course?

2. Please provide specific suggestions as to how the **instructor** could have helped you learn more effectively.

3. Please provide specific suggestions as to how this **course** could be improved.

RESOURCES

1. [Academic Year Important Dates](#)
2. [Computer Help Desk](#)
3. [Equity and Human Rights Office](#)
4. [HINF Library](#)
5. [HSD Indigenous Student Support](#)
6. [Indigenous Academic & Community Engagement](#)
7. [Learning and Teaching Support and Innovation](#)
8. [Math and Stats Assistance Centre](#)
9. [Office of the Ombudsperson](#)
10. [Office of Student Life](#)
11. [Sexualized Violence Prevention & Awareness](#)
12. [Student Mental Health](#)
13. [UVic Libraries](#)
14. [Well-being](#)

ONLINE LEARNING TECHNOLOGIES

Instructors use a variety of educational technology in courses including internet-based technologies or web-based applications, cloud services and social media. The use of technology is part of your engagement at the University. Some of these learning tools may collect, use and/or disclose your personal information and store or access that information outside of Canada.

UVic cannot require students to disclose personal information to technologies or organizations which may store information on servers located outside of Canada because disclosure of personal information to vendors, systems or services storing or accessing that personal information outside of Canada is restricted by section 30.1 of BC's *Freedom of Information and Protection of Privacy Act* (FIPPA). Personal information is information about an identifiable individual; for example, your name or your email address.

As of the creation of this course, the following educational technologies, which stores or accesses your personal information outside Canada, are required for this course:

- Zoom - for oral assessments
- YouTube - medical videos and animations

I will make you aware if this list changes.

With respect to the technologies listed above, if you are not comfortable with your personal information being stored outside of Canada, please speak to me within the first week of class. Otherwise, by continuing in this course, you agree to the use of the educational technology in the course and the storage of personal information outside of Canada.

WELLNESS SUPPORTS FOR STUDENTS

A note to remind you to take care of yourself. Diminished mental health can interfere with optimal academic performance. Do your best to engage in self-care and maintain a healthy lifestyle this semester. This will help you achieve your goals and cope with stress. All of us benefit from support. The UVic Student Wellness Centre provides cost-free and confidential mental health services to help you manage personal challenges that impact your emotional or academic well-being. Please feel free to contact me, even for a chat, for anything that is in your way of your success.

HEALTH INFORMATION SCIENCE (HINF) AND FACULTY OF HUMAN & SOCIAL DEVELOPMENT (HSD) POLICIES

1. HINF Undergraduate Academic Policies
2. HINF Academic Regulations
3. HSD Guidelines for Professional Conduct

UNIVERSITY ACADEMIC POLICIES

1. Academic Concessions
2. Academic Integrity including Unauthorized Use of an Editor - Academic Integrity Violations include, but are not limited to: plagiarism (e.g., submitting someone else's work as your own, not citing your sources), unauthorized use of an editor, submitting the same work more than once, falsifying materials, cheating (e.g., having unauthorized materials such as a phone or notes during a test), and helping others cheat. We encourage you to review the University's Policy on Academic Integrity and we expect you to adhere to this policy in its entirety.
3. Privacy and Access to Information Office
4. Accessible Learning – The University of Victoria is committed to creating a learning experience that is as accessible as possible. If you are registered with the Centre for Accessible Learning (CAL) and anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me. If you have a disability or chronic health condition, or think you may have a disability, you may also want to meet with an advisor at the Centre for Accessible Learning https://www.uvic.ca/services/cal/
5. Integrity Matters
6. UVic Grading Scale & Review Process

CENTRE FOR ACADEMIC COMMUNICATION

At the Centre for Academic Communication (CAC), we offer online one-on-one tutorials, workshops, and more. Our free services are available to all University of Victoria students. We are here to support you with reading, writing, speaking, understanding academic expectations, and other aspects of academic communication. For details see: https://onlineacademiccommunity.uvic.ca/writingresources/

DISCRIMINATION AND HARASSMENT

Discrimination and Harassment are prohibited at the University of Victoria. Members of the University Community have the right to work, study and participate in activities at the university in an environment free of Discrimination and Harassment. Eligible WorkSafeBC claimants also have a right to an environment free of workplace bullying or harassment as it is defined by regulations pursuant to the British Columbia Workers' Compensation Act. Please refer to University of Victoria discrimination and harassment policy at: https://www.uvic.ca/universitysecretary/assets/docs/policies/GV0205_1150_.pdf and WSBC bullying and harassment policies at: https://www.uvic.ca/ohse/assets/docs/BH_policies_Nov1_2013.pdf

SEXUALIZED VIOLENCE PREVENTION AND RESPONSE AT UVIC

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out: Where: Sexualized violence resource office in EQHR, Sedgewick C119 Phone: 250.721.8021 Email: svpcoordinator@uvic.ca Web: www.uvic.ca/svp

UNIVERSITY OF VICTORIA STUDENTS' SOCIETY (UVSS)

The UVSS is a social justice based non-profit run by students, for students and is entirely separate from UVic. As an undergrad student, you are already a member! We work on issues affecting students such as affordability, public transit, sexualized violence, sustainability, student employment, and much more. We fund clubs and course unions, and have several advocacy groups. We also have a Food Bank and Free Store, a Peer Support Centre, and run your health and dental plan. We are here to support you, so please reach out to us at uvss.ca!

FAIR DEALING STATEMENT

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another exception in the Copyright Act. Violations may result in disciplinary action under the [Resolution of Non-Academic Misconduct Allegations policy (AC1300)](#).

CAPTIONING STATEMENT

Auto-generated captioning is enabled in this course. Please be aware that automated captioning is at best 70-90% accurate and by nature will include error. This depends on the subject matter, speaker, audio quality etc. Words prone to error include specialized terminology and proper names. Students are asked to refer to the audio feed for clarification of any errors. If you find **captioning that is offensive**, please contact your instructor and/or teaching assistant so that they are aware. If you require captions as part of an academic accommodation, please contact *[CAL](#)*.

ONLINE CONDUCT STATEMENT

The University of Victoria is committed to promoting critical academic discourse while providing a respectful and supportive learning environment. All members of the university community have the right to this experience, and the responsibility to help create, such an environment. The University will not tolerate racism, sexualized violence, or any form of discrimination, bullying or harassment. Please be advised that by logging into UVic's learning systems and interacting with online resources you are engaging in a university activity. All interactions within this environment are subject to the university expectations and policies. Any concerns about student conduct, may be reviewed and responded to in accordance with the appropriate university policy. To report concerns about online student conduct: onlineconduct@uvic.ca.

CLASS RECORDING (ECHO360)

Be aware that sessions in this course may be recorded to allow students who are not able to attend to watch later. The recording will be posted in Brightspace. Students who have privacy concerns can contact me and will have the option to limit their personal information shared in the recording. If you have other questions or concerns regarding class recording and privacy please contact privacyinfo@uvic.ca.

DISCLAIMER

The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

Schedule At A Glance

Week 1

Jan 9, 2023 - Introduction, Data and Information in Clinical Area
Learning Objectives:
- Review of the course schedule, expectations and outcomes
- Establishing an understanding of data and information and understanding what data and information means in clinical practice.

Jan 11, 2023 - Introduction, Data and Information in Clinical Area
- Developing an understanding of chemical and electrical communication within human body.
Reading:
- Chapter 1: Organization of Human Body

Week 2

Jan 16, 2023 - Endocrine System and Diabetes
Learning Objectives:
- Review of the chemistry in the body and endocrine system
- Understanding systemic effects of endocrine system through a case study.
Reading:
- Chapter 2: Chemistry, Matter and Life
- Chapter 12: The Endocrine System: Glands and Hormones

Jan 18, 2023 - Endocrine System Case Study - NEJM Case 24 - 2019 -A 39 Year Old Woman with Palpitations, Abdominal Pain and Vomitting

Week 3

Jan 23, 2023 - Tissues and Sensory System, and Cancer and Cataract
Learning Objectives:
- Review of Tissues, Glands and Membranes and understanding of one the most significant disease of all tissues – Cancer
- Review of Sensory system and understanding lens opacity and treatment
Reading:
- Chapter 4: Tissues, Glands and Membranes
- Chapter 11: The sensory system

Jan 25, 2023 - Case 21-2012 — A 27-Year-Old Man with Fatigue, Weakness, Weight Loss, and Decreased Libido

Week 4

Jan 30, 2023 - Skeletal and Muscular System, Arthritis, Osteoporosis, Muscular Dystrophies and Myasthenia Gravis
Learning Objectives:
- Review of musculosketelal system

- Understanding some of the diseases of the musculosketelal system such as Arthritis, Osteoporosis, muscular dystrophies, and myasthenia gravis

Reading:
- Chapter 7: The skeleton: Bones and Joints
- Chapter 8: The muscular system

Feb 1, 2023 - Case 26-2013 — A 46-Year-Old Woman with Muscle Pain and Swelling

Week 5

Feb 6, 2023 - Nervous System, Stroke
Learning Objectives:
- Review of nervous system
- Understanding some of the diseases of the nervous system such as stroke, alzheimers and trauma

Reading:
- Chapter 9: The Nervous System: The spinal cord and spinal nerves
- Chapter 10: The Nervous System: The Brain and Cranial nerves

Feb 8, 2023 - Case 8-2014 — A 29-Year-Old Man with Headache, Vomiting, and Diplopia

Week 6

Feb 13, 2023 - Blood and Lymphatic System, Anemia and Leukemia
Learning Objectives:
- Review of blood and lymphatic system
- Understanding some of the diseases of the blood and lymphatic system: Anemia leukemia, multiple myeloma

Reading:
- Chapter 3: Page 47-50, Movement of Substances Across the Plasma Membrane
- Chapter 13: The Blood
- Chapter 16: The lymphatic System and Lymphoid Tissue
- Chapter 21: Body Fluids

Feb 15, 2023 - Case 36-2017: A 30-Year-Old Man with Fatigue, Rash, Anemia, and Thrombocytopenia

Week 7 – Feb 20/22, 2023 - Reading Break
Rest and catch up.

Week 8

February 27, 2023 - Infections and Immunity, Allergy – Autoimmune diseases
Learning Objectives:
- Review of Infections and immune system
- Understanding some of the disorders of the immune system and some of the infectious diseases, such as autoimmune disorders, asthma, e.coli infections, HIV infection.

Reading:
- Chapter 5: Disease and Disease producing organisms
- Chapter 17: Body Defenses, Immunity and Vaccines

March 1, 2023 - Case 8-2015 — A 68-Year-Old Man with Multiple Myeloma, Skin Tightness, Arthralgias, and Edema

Week 9

March 6, 2023 – Circulation – Heart Failure, Coronary Artery Disease
Learning Objectives:
- Review Circulatory System, heart, vascular structure, and electrical conduction system
- Understanding some of the disorders of the circulatory system such as Coronary artery disease and heart failure

Reading:
- Chapter 18: Respiration
- Chapter 6: The Skin in the Health and Disease

March 8, 2023 – Case 36-2007 — A 31-Year-Old Woman with Rash, Fever, and Hypotension

Week 10

March 13, 2023 - Respiration and Chronic Obstructive Pulmonary Disease; Skin
Learning Objectives:
- Review Pulmonary System and skin.
- Understanding some of the disorders of the pulmonary system such as chronic bronchitis, Emphysema, .Malignant Mesothelioma,

Reading:
- Chapter 18: Respiration
- Chapter 6: The Skin in the Health and Disease

March 15, 2023 - Case 26-2009 — A 34-Year-Old Man with Cystic Fibrosis with Abdominal Pain and Distention

Week 11

March 20, 2023 - Digestive System and Lipids - Cirrhosis, Cancer
Learning Objectives:
- Review of Digestive System and Lipid metabolism.
- Understanding some of the disorders of the digestive system GERD, Pancreatitis, Cholecystitis, Crohn's disease, Ulcerative Colitis, and acute conditions such as appendicitis, volvulus, intussception.
- Understanding the impact of colostomy or ileostomy.

Reading:
- Chapter 19: Digestive System
- Chapter 20: Metabolism, Nutrition, and Body Temperature

March 22, 2023 - Case 7-2016: An 80-Year-Old Man with Weight Loss, Abdominal Pain, Diarrhea, and an Ileocecal Mass

Week 12

March 27, 2023 - Urinary System and Reproductive System – Chronic Kidney Disease,
Learning Objectives:
- Review of the urinary system and reproductive systems.
- Understanding some of the disorders of kidney such as Polycystic kidney, Glomerulonephritis, affects of diabetes, and disorders of the urinary track such as urolithiasis, and distortions of the ureter.
- Understanding some of the disorders of the reproductive system such as myoma, Endometriosis, infertility. Prostate cancer, and observe some of the procedures such as cesarean section, vaginal delivery, vasectomy.

Reading:
- Chapter 22: Urinary System
- Chapter 23: The Male and Female Reproductive Systems
- Chapter 24: Development and Birth

March 29, 2023 - Case 17-2018: A 40-Year-Old Woman with Leg Swelling and Abdominal Distention and Pain

Week 13

April 3, 2023 - Psychological Disorders Overview and Schizophrenia, Major Depression and Bipolar Disorder
Learning Objectives:
- Review of Psychologic disorders
- Understanding some of the disorders such as depression, schizophrenia, Bi-polar disorder.
- Students from the Applied Theater course will be coming to class for their presentations of the mental disorders.

Reading:
- Psychological and Psychiatric Disorders – To be Announced

April 5, 2023 - Case 40-2015 — A 40-Year-Old Homeless Woman with Headache, Hypertension, and Psychosis

EVALUATION CRITERIA and REQUIREMENTS FOR ASSIGNMENTS

Assignments can be done in groups of maximum 3 members. Group members can change between assignments. You are not expected to hold on to the group members in your group if they are not delivering agreed upon content in time. Please let the instructor no later than 3 days to the submission date, if you do not want a particular member in your group anymore. They would be expected submit their assignment alone.

1. **12 Quizzes:**

A quiz will be given every session except for the first one. All quizzes are online and time limited (when it needs to be taken). Missing quizzes will be given the mark of "0". Make-ups for missed quizzes are provided when a proven reasons for missing the quiz is submitted. Each quiz will cover the readings required for the session and in class case study discussions. Quizzes will be completed within 24 hours after the session. All quizzes will be posted in Brightspace prior to the session.

2. **Chronic Disease Assignment**

Chronic disorder assignment is designed to review disease process for a selected disease. The objective here is to define the events, progress, changes before, during and after the disease and living with a progressive disease.

Groups/individuals need to choose a chronic disease and let instructor know which disease they will be working on by the end of the third week. A list provided in Brightspace.

Chronic Disorder: This research assignment has two components. Evidence about the disease and perspectives of all involved. The assignment will describe physiopathology of the disease, symptoms and diagnostic test and tools, possible treatment methodologies and their benefits and complications and the prognosis of the disease with reasons for death. Assignment will also describe what a patient with this disease would go through from the first signs of the disease to death. The following questions are provided as guidelines:

1. Disease and Disease Process: What are the physiopathology of the disease?

    a. What were the risk factors, if any?
    b. How often is the disease seen in population (prevalence and incidence)?
    c. What were the early warning signs?
    d. How does the disease develop?
    e. What were the complaints and symptoms?
    f. What physical examination and tests used and what variations from normal is seen?
    g. What were those findings indicate? How did the disease cause the difference from expected normal? What physiologic and physiopathologic mechanisms were involved?
    h. What treatment options available and how do they affect the prognosis?
    i. How does the death occur? Why does death occur?

2. Patient and their environment: What is a person with this disease go through? How does the function of the individual change from the development of disease to death? How does the role of the individual in the society change as a result of the disease? How does the family and support systems get affected from the disease. More specific questions to consider.

    j. What does the patient lose with the disease?
    k. How does the loss affect the patient?

l. How does the family get affected from this disease of their loved one?
m. What kinds of strategies does families develop to cope?
n. What do the health care providers care about?
o. How do they interact with the patient?

<u>Evaluation of the Assignment:</u> Maximum total length of the paper is 6 paged single spaced and 12 pages double spaced. A minimum of 12pt characters must be used with one inch or 2.54 cm borders. Appendices are not counted within the page limit.

Disease and disease process constitutes 70 percent of the mark and patient and his/her environment constitutes 20 percent of the mark. 10% is dedicated for quality of writing and referencing (logical flow, clarity, brevity, factual, without duplications).

3. Acute Disease Assignment:

The case study will develop an avatar and describe the life of the avatar before the diagnosis of the disease, diagnosis of the disease, treatment and treatment results. The assignment is written the perspective of the individual who is suffering from the disease. The story will be told by the individual including, if any, the impact to the family and all of the learning regarding the disease.
Answers to the following questions will be required in the case study:
1. How was the patient living before contracting the disease?
    p. What were the risk factors, if any?
    q. How often is the disease seen in population (prevalence and incidence)?
    r. What are the early warning signs that your avatar ignored, if any?
2. How was the diagnosis established for your avatar?
    s. What are the complaints and symptoms?
    t. What physical examination and tests are completed and what are findings?
    u. What are those findings indicate? How does the disease cause the difference from expected normal? What physiologic and physiopathologic mechanisms are involved?
    v. What kind of treatment(s) can be given?
    w. If patients survive, what kind of sequela is seen after the treatment? If they may die, how and why death occurs.

<u>Evaluation of the Assignment:</u> Maximum total length of the paper is 4 paged single spaced and 8 pages double spaced. A minimum of 12pt characters must be used with one inch or 2.54 cm borders. Appendices are not counted within the page limit.

Disease and disease process constitutes 70 percent of the mark, and written from patient perspective 15% of the mark and 15% is dedicated for quality of writing and referencing (logical flow, clarity, brevity, factual, without duplications).

4. Information System Design:

Information system design assignment involves reconsidering the chronic disease assignment from an information systems perspective.

Information system design assignment will be based on a chronic disease of students' choice. The assignment will answer the following questions within the context of the disease. The basic question

that the assignment should answer is "What information is needed by whom to do what?" Disease specific practice guidelines are generally quite useful for answering these questions.

For each level of the disease progression (before disease, once diagnosed, after complications appear to death)

1. What are the risk factors for this disease
2. Who is (are) the decision maker(s)?
3. What data should be collected and what information must be fed to who?
4. What is (are) the objective(s) of collecting and providing information? What are we trying to do with the information and Why?
5. What is the best medium of information collection?
6. What is the frequency of collecting this data/information?

Evaluation of the Assignment: Maximum total length of the paper is 4 paged single spaced and 8 pages double spaced. A minimum of 12pt characters must be used with one inch or 2.54 cm borders. Appendices are not counted within the page limit.

Correct identification of critical factors in each stage of the disease, identification of patient and health system objectives for patient at various stages of the disease, identification of critical data required (lab, examination, patient reported tests) for decision making, and identification of system linkages required for information transfer establishes 70% of the total mark. **A system relationship diagram(s)** will establish 20% of the total mark. 10% is dedicated for quality of writing and referencing (logical flow, clarity, brevity, factual, without duplications)

5. Case Study Homework:

In addition to the quizzes there will be two case study homework. Case study homework will be delivered through Brightspace. Students will have one week to complete these two assignments. The same case study will be used, however questions will relate to whole course material up to that point. The objective of the case study homework is to combine the learnings up to that point. Each case study homework is 10% of the total course mark.

6. Oral Assessment:

Oral assessment will involve a meeting with the instructor and the teaching assistant. Broad questions for the oral assessment will be provided. The students would use any chronic disease to demonstrate their knowledge of the terminology, disease process, diagnostic techniques, lab results, disease prognosis. The oral assessment is conducted in a conversational structure. The meeting will be organized with students in groups of 3 throughout the course. This activity will start after students submit their chronic disease assessment and will continue until mid -April. Oral assessment is 20% of the total course mark.