



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

LAST REVIEW: 2006-2007
(i.e. 2003-2004)

NEXT REVIEW: 2011-2012
(i.e. 2008-2009)

STATUS: A
(A, I, D)

COURSE TITLE: Survey of Pathological Deficits

COMMON COURSE NUMBER: PHT 1300

CREDIT HOURS: 4

CONTACT HOUR BREAKDOWN
(per 16 week term)

CLOCK HOURS:
(Voc. Course ONLY)

Lecture: **64** Lab:
Clinic: Other:

PREREQUISITE(S):

COREQUISITE(S):

PRE/COREQUISITE(S): PHT 1200

COURSE DESCRIPTION (750 characters, maximum):

Course introduces the student to general pathological conditions with emphasis on those commonly seen in the field of physical therapy. Basic system anatomy is reviewed with an emphasis on the pathophysiology of disease. Descriptions of how diseases are classified, diagnosed and treated, as well as the natural course/prognosis of these diseases are presented. Implications of disease processes as well as contraindications and precautions and patient/caregiver education related to physical therapy are discussed through case study analysis. When relevant, specific physical therapy plans, such as chest PT, are discussed. The effects of aging upon disease and in general are considered.

UNIT TITLES

- 1.0 *Overview of Pathology*
- 2.0 *Disorders that Affect Mentation*
- 3.0 *Oncology*
- 4.0 *Pathological Deficits of the Immune System*
- 5.0 *Pathological Deficits of the Endocrine System*
- 6.0 *Pathological Deficits of the Digestive System*
- 7.0 *Pathological Deficits of the Renal System*
- 8.0 *Pathological Deficits of the Hematopoetic System*
- 9.0 *Pathological Deficits of the Cardiovascular System*
- 10.0 *Pathological Deficits of the Respiratory System*
- 11.0 *Pathological Deficits of the Integumentary System*



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

1. Announced and unannounced quizzes and Unit examinations;
2. Mid term and/or Final Exam (cumulative/comprehensive);
3. Assessment of reading and online assignments via submission of homework projects;
4. Participation in Discussion Forums on the WebCT site

**** Complete the following only if course is seeking general education status ****

GENERAL EDUCATION Competencies and Skills *:

Please highlight in green font all Competencies/Skills from the list below that apply to this course. In the box to the right of the Competency/Skill, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 5.12) that apply.

1. Read with critical comprehension	
2. Speak and listen effectively	
3. Speak and listen effectively	
4. Think creatively, logically, critically, and reflectively (analyze, synthesize, apply, and evaluate)	
5. Demonstrate and apply literacy in its various forms: <i>(highlight in green ALL that apply)</i> (1. technological, 2. informational, 3. mathematical, 4. scientific, 5. cultural, 6. historical, 7. aesthetic and/or 8. environmental)	
6. Apply problem solving techniques to real-world experiences	
7. Apply methods of scientific inquiry	
8. Demonstrate an understanding of the physical and biological environment and how it is impacted by human beings	
9. Demonstrate an understanding of and appreciation for human diversities and commonalities	
10. Collaborate with others to achieve common goals.	
11. Research, synthesize and produce original work	
12. Practice ethical behavior	
13. Demonstrate self-direction and self motivation	
14. Assume responsibility for and understand the impact of personal behaviors on self and society	
15. Contribute to the welfare of the community	

** General Education Competencies and Skills endorsed by '05-'06 General Education Task Force*



Common Course Number: PHT 1300

UNITS

Unit 1 Overview of Pathology

General Outcome:

- 1.0 The student will be able to demonstrate an understanding of the categories of information useful in describing disease processes

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 1.1 Define the terms etiology, signs/symptoms, prognosis and pathology.
- 1.2 Understand statistical significance of disease states i.e., morbidity, mortality, incidence, prevalence.
- 1.3 Differentiate between acute, chronic and sub-acute conditions.
- 1.4 List the major categories of human disease.
- 1.5 Explain the approaches that a practitioner uses to make a diagnosis.
- 1.6 Describe the various types of diagnostic tests that aid in proper diagnosing.
- 1.7 Describe the mechanisms by which disease occurs.
- 1.8 Discuss the physiological events that occur during the three phases of tissue repair and recovery.
- 1.9 List the clinical manifestations of an acute inflammation.
- 1.10 Discuss in general terms the three theories of aging.
- 1.11 In general terms, define precautions and special considerations to the performance of physical therapy interventions.
- 1.12 Describe the value of patient education on their disease/condition.
- 1.13 Detail items that may be included in patient education related to their disease/condition.
- 1.14 List the categories of information that might be gathered in a medical record review prior to physical therapy interventions.
- 1.15 List the categories of information that might be gathered during a patient interview prior to the performance physical therapy interventions.
- 1.16 Define what is meant by alternative and complementary therapies.



Common Course Number: PHT 1300

Unit 2 Disorders that Affect Mentation

General Outcome:

- 2.0 The student will be able to differentiate the disorders that affect mentation that are often encountered by the PTA

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 2.1 Discuss the clinical significance of mental disorders as they relate to the provision of physical therapy.
- 2.2 Discuss the stages of grief including patient presentation and clinician interactions during each stage.
- 2.3 List the etiology, primary symptoms/signs and management related to specific mental disorders such as schizophrenia, affective disorders, anxiety disorders, panic disorder, personality disorders, post traumatic stress disorder and conversion disorder
- 2.4 Detail changes that can occur in the direction and magnitude of a patient's state of arousal, mentation and cognition, which may affect prognosis and outcomes.
- 2.5 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disorder affecting mentation.
- 2.6 Detail items that may be included in patient education related to disorders affecting mentation.
- 2.7 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with a disorder affecting mentation.
- 2.8 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with a disorder affecting mentation.
- 2.9 List alternative and complementary therapies that that apply to the management of an individual with a disorder affecting mentation.



Common Course Number: PHT 1300

Unit 3 Oncology

General Outcome:

- 3.0 The student will be able to detail the specifics of hyperplasias, neoplasms and cancer.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 3.1 Define hyperplasia, neoplasm, hypertrophy and metastasis as they relate to abnormal growth.
- 3.2 List the classifications of neoplasms and differentiate between benign and malignant.
- 3.3 List and explain common carcinogenic agents.
- 3.4 Discuss the significance of grading and staging as it relates to cancer diagnosis.
- 3.5 Discuss in general the clinical manifestations of cancer.
- 3.6 Explain the medical management of cancer including radiation and chemotherapy, hormonal therapy and palliative management.
- 3.7 List the tools utilized to diagnose cancer.
- 3.8 Discuss the role of physical therapy in the management of breast and lung cancer.
- 3.9 Discuss the etiology, signs/symptoms and treatment of breast and lung cancer.
- 3.10 Explain lymphedema and the role of physical therapy in management of the condition.
- 3.11 Discuss the changes which occur across the life span which affect the development of neoplasms and cancer.
- 3.12 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with cancer.
- 3.13 Detail items that may be included in patient education related to cancer.
- 3.14 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with cancer.
- 3.15 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with cancer.
- 3.16 List alternative and complementary therapies that apply to the management of an individual with cancer



Common Course Number: PHT 1300

Unit 4 Pathological Deficits of the Immune System

General Outcome:

- 4.0 The student will be able to describe the specifics of pathological deficits affecting the immune system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 4.1 List the components of the immune system and describe its normal functioning.
- 4.2 Explain the body's three defense mechanisms against infection.
- 4.3 Recognize the clinical features of an infectious disease in a patient.
- 4.4 Discuss the clinical presentation and mode of transmission for viral diseases.
- 4.5 Describe the clinical presentation and management of common bacterial infections such as MRSA, E coli, C-difficile, and Lyme disease.
- 4.6 Describe the clinical presentation and management common viral infections.
- 4.7 Describe the similarities and differences between Hodgkin's disease and non-Hodgkins lymphoma.
- 4.8 Discuss the role of physical therapy in the management of infectious diseases.
- 4.9 Discuss precautions that should be taken to avoid the spread of infectious diseases.
- 4.10 Discuss the changes, which occur across the life span which affect the immune system.
- 4.11 Distinguish between malfunctions of the immune system including allergy, autoimmune disease and immunodeficiency.
- 4.12 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a bacterial or viral infection.
- 4.13 Detail items that may be included in patient education related to their infection.
- 4.14 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with an infection.
- 4.15 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with an infection.
- 4.16 List alternative and complementary therapies that apply to the management of an individual with bacterial or viral infection.



Common Course Number: PHT 1300

Unit 5 Pathological Deficits of the Endocrine System

General Outcome:

- 5.0 The student will be able to describe the specifics of pathological deficits affecting the endocrine system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 5.1 Discuss the role of the endocrine system in a normally functioning body.
- 5.2 List & describe common pathological disorders affecting the endocrine system: Hyper/hypopituitarism, Hyper/hypothyroidism, Hyper/hypoparathyroidism, Adrenocortical hyper/hyposecretion
- 5.3 Distinguish between non-insulin dependent and insulin dependent diabetes mellitus.
- 5.4 Discuss hyperglycemia and diabetic coma including precipitating factors, physiologic events and clinical presentation of the patient.
- 5.5 Discuss hypoglycemia and diabetic shock including precipitating factors, physiologic events and clinical presentation of the patient.
- 5.6 Discuss the role of physical therapy in the management & prevention of diseases occurring in this system
- 5.7 Discuss the changes, which occur across the life span, which affect the endocrine system.
- 5.8 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease of the endocrine system.
- 5.9 Detail items that may be included in patient education related to their endocrine disease.
- 5.10 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with an endocrine disease.
- 5.11 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with an endocrine disease.
- 5.12 List alternative and complementary therapies that apply to the management of an individual with an endocrine disease.



Common Course Number: PHT 1300

Unit 6 Pathological Deficits of the Digestive System

General Outcome:

- 6.0 The student will be able to describe the specifics of pathological deficits affecting the digestive system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 6.1 Describe the various causes of vomiting and the vomiting process.
- 6.2 Differentiate diarrhea from constipation.
- 6.3 Explain the common causes of dysphagia.
- 6.4 Explain the affects of hiatal hernias.
- 6.5 List the causes of acute gastritis and describe the common signs.
- 6.6 Compare the effects of acute gastritis, chronic gastritis, and gastroenteritis.
- 6.7 Describe the etiology, signs, and possible complications of peptic ulcers.
- 6.8 Compare the types of infectious hepatitis.
- 6.9 Explain how pyloric stenosis interferes with normal function and list the common manifestations.
- 6.10 Describe how gall stones develop and the signs of obstruction.
- 6.11 Define jaundice.
- 6.12 Differentiate the types of cirrhosis.
- 6.13 Describe the pathophysiology, signs, and possible complications of acute pancreatitis.
- 6.14 Compare Crohn's disease with ulcerative colitis.
- 6.15 Explain how diverticulitis and diverticulosis develop.
- 6.16 Describe the causes and possible characteristics of cancers of the digestive system.
- 6.17 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with a disease of the digestive system.
- 6.18 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with a disease of the digestive system.
- 6.19 List alternative and complementary therapies that apply to the management of an individual with a disease of the digestive system.



Common Course Number: PHT 1300

Unit 7 Pathological Deficits of the Renal System

General Outcome:

- 7.0 The student will be able to describe the specifics of pathological deficits affecting the renal system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 7.1 Differentiate between normal vs. abnormal kidney functioning.
- 7.2 List and describe common pathological disorders affecting the renal system including: incontinence, acute and chronic renal failure
- 7.3 Explain the role of dialysis in the management of renal failure.
- 7.4 Discuss the role of physical therapy in the management and prevention of diseases occurring in this system.
- 7.5 Discuss the changes which occur across the life span which affect the renal system.
- 7.6 Identify common tests utilized in the diagnoses of diseases of the renal system.
- 7.7 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease of the renal system.
- 7.8 Detail items that may be included in patient education related to their renal disease.
- 7.9 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with a renal disease.
- 7.10 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with a renal disease.
- 7.11 List alternative and complementary therapies that apply to the management of an individual with a renal disease.



Common Course Number: PHT 1300

Unit 8 Pathological Deficits of the Hematopoietic System

General Outcome:

- 8.0 The student will be able to describe the specifics of pathological deficits affecting the hematopoietic system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 8.1 Differentiate normal vs. abnormal components of blood.
- 8.2 Identify common laboratory values utilized in diagnosing disease of the hematopoietic system.
- 8.3 List and describe common pathological disorders affecting the hematopoietic system including: Sickle Cell anemia, Iron Deficiency Anemia, Megaloblastic Anemia, Aplastic Anemia, Leukemia and Hemophilia
- 8.4 Discuss the role of physical therapy in the management of diseases occurring in the hematopoietic system.
- 8.5 Discuss the changes which occur across the life span which affect the hematopoietic system.
- 8.6 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease compromising the hematopoietic system.
- 8.7 Detail items that may be included in patient education related to hematopoietic disease or electrolyte imbalance.
- 8.8 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient with an endocrine disease.
- 8.9 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with a disease affecting the hematopoietic system.
- 8.10 List alternative and complementary therapies that apply to the management of an individual with a disease affecting the hematopoietic system.



Common Course Number: PHT 1300

Unit 9 Pathological Deficits of the Cardiovascular System

General Outcome:

- 9.0 The student will be able to describe the specifics of pathological deficits affecting the cardiovascular system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 9.1 List and describe common pathological deficits affecting the cardiovascular system including: Brady/tachycardia, Atrial/ventricular Fibrillation, Primary/secondary Hyper-tension, Rheumatic Heart Disease, Peri/myo/endocarditis, Congestive Heart Failure, Cor Pulmonale, Coronary Artery Disease, Valve Prolapse/regurgitation/stenosis, Raynaud's Disease, Aneurism, Angina Pectoris, Myocardial Infarction, Atherosclerosis, Peripheral Vascular Disease, and Deep Vein Thrombosis.
- 9.2 Describe the surgical interventions utilized in the management of cardiovascular disease.
- 9.3 List the predisposing factors for the development of cardiovascular disease and methods of prevention.
- 9.4 Discuss the role of physical therapy in the management and prevention of diseases occurring in this system.
- 9.5 Discuss the changes across the lifespan effecting on the cardiovascular system.
- 9.6 Discuss the effects of immobility on the body systems.
- 9.7 Identify common tests utilized in the diagnosis of cardiovascular disease.
- 9.8 Describe the anatomy, conduction system and blood flow of the circulatory system.
- 9.9 Discuss the effects of exercise and orthostatic hypotension on cardiac output.
- 9.10 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease of the cardiovascular system.
- 9.11 Detail items that may be included in patient education related to their cardiovascular disease.
- 9.12 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient with cardiovascular disease.
- 9.13 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with cardiovascular disease.
- 9.14 List alternative and complementary therapies that apply to the management of an individual with cardiovascular disease



Common Course Number: PHT 1300

Unit 10 Pathological Deficits of the Respiratory System

- 10.0 The student will be able to describe the specifics of pathological deficits affecting the respiratory system.
- 10.1 Discuss the diagnostic tools utilized in the diagnosis of respiratory diseases.
- 10.2 List & describe common pathological disorders affecting the respiratory system including: Chronic Bronchitis, Pneumothorax, Bacterial viral Pneumonia, Occupational Lung Disease, Pleural Effusion, Atelectasis, Postural Deformities, Pulmonary Tuberculosis, Cystic Fibrosis, Asthma, Emphysema, Pleurisy, Lung Abscess, and Pulmonary Edema.
- 10.3 List possible complications accompanying respiratory diseases and methods to diminish their effects.
- 10.4 Discuss the role of physical therapy in the management and prevention of diseases occurring in the respiratory system.
- 10.5 Discuss the changes across the lifespan effecting on the respiratory system.
- 10.6 Explain the rationale and demonstrate diaphragmatic breathing exercises.
- 10.7 Discuss the technique of postural drainage.
- 10.8 Explain how effectiveness of a postural drainage program is assessed.
- 10.9 Discuss the utilization of percussion and vibration as adjuncts to postural drainage and how the results may be affected.
- 10.10 Understand how to document a chest PT intervention in a progress note.
- 10.11 Define normal and abnormal breath sounds.
- 10.12 List the lung volumes measured during pulmonary function studies.
- 10.13 Detail the various postural drainage positions in terms of positioning and where percussion/vibration will occur.
- 10.14 Describe the anatomy of the lungs and the normal mechanism of respiration.
- 10.15 Define cyanosis including its clinical significance in diseases of the respiratory system.
- 10.16 Relate how thoracoabdominal movements and breathing patterns may be affected by diseases of the respiratory system.
- 10.17 Understand how physical activity may aggravate or relieve dyspnea and other symptoms related to diseases of the respiratory system.
- 10.18 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease of the respiratory system.
- 10.19 Detail items that may be included in patient education related to their respiratory disease.
- 10.20 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with respiratory disease.
- 10.21 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with respiratory disease.
- 10.22 List alternative and complementary therapies that apply to the management of an individual with respiratory disease.



Common Course Number: PHT 1300

Unit 11 Pathological Deficits of the Integumentary System

General Outcome:

- 11.0 The student will be able to describe the specifics of pathological deficits affecting the integumentary system.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 11.1 Discuss normal anatomy and functions of the skin.
- 11.2 List/describe common pathological disorders affecting the integumentary system: Kaposi Sarcoma, Psoriasis, Herpes Zoster, Pediculosis, Scleroderma, Urticaria, Scabies, Malignant Melanoma, and Contact Dermatitis.
- 11.3 Discuss the role of physical therapy in the management of conditions occurring in the skin including contact precautions.
- 11.4 Define common clinical manifestations of diseases of the skin.
- 11.5 Discuss the changes across the lifespan effecting on the integumentary system.
- 11.6 Explain the clinical presentation and healing process for the categories of burns.
- 11.7 Discuss possible complications in burn management.
- 11.8 Detail the medical and physical therapy management during the four phases of recovery following a burn injury.
- 11.9 List the positions to prevent burn scar contractures.
- 11.10 Discuss the surgical procedures and dressing techniques utilized to facilitate healing from a burn.
- 11.11 Define hypertrophic scarring and indicate its implications to recovery.
- 11.12 Explain the clinical presentation of the stages of decubitus development.
- 11.13 Explain the prognosis for decubitus healing and determinants of good vs. poor prognosis.
- 11.14 List common areas of the body that are susceptible to decubitus.
- 11.15 Detail the concepts of management of decubitus ulcers including prevention.
- 11.16 Relate how various positions, activities or postures can aggravate or relieve pain and altered sensations.
- 11.17 Relate how various positions, activities or postures can produce associated skin trauma.
- 11.18 Differentiate between the characteristics of viable versus nonviable tissue.
- 11.19 Detail specific precautions and special considerations to the performance of physical therapy interventions for a patient/client with a disease affecting the integumentary system.
- 11.20 Detail items that may be included in patient education related to their condition involving the integumentary system.
- 11.21 List specific information that should be gathered in a medical record review prior to physical therapy interventions for a patient/client with condition affecting the integumentary system.
- 11.22 List specific information that should be gathered during a patient interview prior to the performance physical therapy interventions for a patient/client with a condition affecting the integumentary system.
- 11.23 List alternative and complementary therapies that apply to the management of an individual with conditions affecting the integumentary system.