

**PT 8550: Integumentary Diagnosis and Interventions**  
**Oakland University**  
**Physical Therapy Department**

**Course Syllabus**  
**Winter 2018**

**Course Description:** In this course students will learn about anatomy, function, disease, injury and conditions that impact the integumentary system. The role of a physical therapist in screening, examination, evaluation, diagnosis, prognosis, plan of care, intervention and outcomes assessment for the integumentary system will be examined.

**Hours:** Wednesdays 1:00 – 4:00  
**Location:** 5002 Human Health Building  
**Credit Hours:** 2  
**Contact Hours:** (28 hours lecture, 10 hours lab, 4 hours clinical visit)

**Instructor:** Jacqueline Scully, PT  
**Office:** 3137 Human Health Building  
**Phone:** (248) 364-8698; (248) 561-4585 (cell)  
**E-mail:** scully@oakland.edu

**Office Hours:** Wednesdays and Fridays 12:00 – 1:00  
Other hours available by appointment

**Instructional Methods:** Students will participate in lectures, in class laboratory activities, case study preparation, and a wound care observation\*.

**Textbooks & Required Reading:**

**Required Textbooks**

- “Wound Care Facts Made Incredibly Quick!” Lippincott & Company, 6<sup>th</sup> Edition; ISBN: 9781582554686

**Course Objectives**

At the completion of this course the student will have achieved the following objectives:

- 1.) Integumentary anatomy
  - a. Describe the structure and function of skin and its various appendages
  - b. Differentiate between viable and non-viable tissue
  - c. Differentiate between superficial, partial-thickness, and full-thickness wounds
- 2.) Physiology of wound healing
  - a. Identify the important aspects associated with the phases of wound healing
  - b. Differentiate between 3 types of union
  - c. Compare & contrast abnormal wound healing
- 3.) Factors affecting wound healing
  - a. Evaluate if a wound is chronic or acute based upon case presentation
  - b. Identify factors that delay wound healing
  - c. Design methods to prevent and/or manage factors that delay wound healing
- 4.) Examination of open wounds
  - a. Describe the components of a wound exam

- b. Create a SOAP note that identifies and documents wound characteristics
- c. Evaluate patient prognosis based upon patient response to treatment
- d. Collaborate with patient and family members to develop a plan of care that is safe, effective and patient-centered
- e. Formulate treatment goals and interventions for a patient with an open wound that take into account practice setting and cultural and societal issues

5.) Debridement

- a. Demonstrate and explain proper techniques for sharp debridement on a pig foot
- b. Compare / contrast methods of wound debridement and their uses
- c. Analyze when debridement is appropriate & contraindicated
- d. Identify which forms of debridement may be delegated to a physical therapy assistant and which should be performed exclusively by a physical therapist

6.) Managing infection

- a. Identify factors that increase the risk of wound infection
- b. Compare / contrast clinical signs of inflammation and infection
- c. Describe methods to diagnosis and prevent wound infections
- d. Demonstrate the ability to set-up a sterile field

7.) Dressing selection

- a. Critique the major categories of wound dressings according to the class text
- b. Design appropriate dressing interventions for patient case scenarios
- c. Examine the indications & contraindications for each category of dressing

8.) Interventions (electrotherapy, modality, and manual lymphatic drainage):

- a. Explain the guidelines for the safe and appropriate application of the following modalities to promote wound healing: hydrotherapy, electrical stimulation, ultrasound, hyperbaric oxygen, pulsed lavage, and compression
- b. Interpret when adjunctive interventions should be considered for wound healing based upon analysis of wound outcome measures
- c. Select appropriate electrotherapy modalities and physical agents to enhance wound healing based upon wound presentation, wound etiology, and patient status
- d. Define and describe manual lymphatic drainage techniques commonly utilized by physical therapists

9.) Types of ulcers (arterial, venous, pressure, neuropathic, burns & miscellaneous)

- a. Assess wound type based upon subjective patient information, culturally appropriate and age-related physical therapy tests and measures, and other available medical information
- b. Design appropriate treatment interventions for a wound based upon a physical therapy diagnosis, best available evidence, and patient preference. This includes skills related to debridement, clinical decision making about the appropriate dressing for a wound, application of therapeutic modalities, application of topical agents, and integumentary repair and protection techniques.
- c. Identify tests and measures which help differentiate wound etiology, including tests which assess the circulatory status of the arterial, venous, and lymphatic systems, and tests which examine pain and sensation.
- d. Identify factors that predict risk of developing pressure ulcers and describe methods used to prevent them
- e. Examine the etiology and complications of diabetes, and plan treatment interventions to assist/prevent the complication of diabetes

- f. Formulate treatment plans that collaborate, communicate, and integrate care with other health care practitioners.
- g. Select outcome measurements that are valid, reliable, and relevant to the type of ulcer being examined.

10.) Professional behaviors

- a. Display sensitivity and professional demeanor during observation of patients at a local wound care facility
- b. Cooperate in a team project, showing the ability to provide ideas while listening to the opinions of others
- c. Justifies constructive feedback to classmates about work completed on a team project in a diplomatic and culturally competent manner

**Student Evaluation / Grading**

Exam #1	20%
Exam #2	20%
Exam #3	20%
Sterile Field Practical	10%
Wound Care Observation/ Video Review	15%
Group Projects/Presentations	5%
Dressing Assignment	5%
Attendance/Participation	5%
*Competency (Debridement)	Pass / Fail

**Grading Scale**

GP Numerical	Letter	Percent		GP Numerical	Letter	Percent		GP Numerical	Letter	Percent
4.0	A	100 - 96		2.9	C	79		1.9	D	69
3.9	A	95		2.8	C	78		1.8	D	68
3.8	A	94		2.7	C	77		1.7	D	67
3.7	A	93 - 92		2.6	C	76		1.6	D	66
3.6	A	91 - 90		2.5	C	75		1.5	D	65
3.5	B	89		2.4	C	74		1.4	D	64
3.4	B	88		2.3	C	73		1.3	D	63
3.3	B	87 - 86		2.2	C	72		1.2	D	62
3.2	B	85 - 84		2.1	C	71		1.1	D	61
3.1	B	83 - 82		2.0	C	70		1.0	D	60
3.0	B	80-81						0.0	E	59 and below

### **Exams (20% x 3)**

- Three written exams will be given throughout the semester.
- Questions include multiple choice, fill in the blanks, identification and documentation.

### **Sterile Field Practical (10%)**

- The practical exam will involve setting up a Sterile Field.
- Each student must pass the practical exam with a minimum of 80%.
- If a score of less than 80% is achieved, one re-take is permissible.
- If the student fails due to a safety reason, one re-take is allowed.
- The final score following a re-take will not be greater than original score, even if the re-take is significantly higher.
- The scoring rubric will be available on Moodle.

### **Wound Care Observation / Video Review (15%)**

- Each student is responsible for observing wound care interventions in a clinic specializing in the treatment of wounds or finding a video of a dressing change of a wound.
- The observation assignment is to observe treatment for a period of 3-4 hours, during one day.
- Students will sign up in groups of 2, with the observations completed by April 13.
- Each group will be responsible for contacting the assigned clinic one week before the observation to verify that the observation has not been cancelled for any reason. (Contact information will be provided).
- At the completion of the observation, the following is expected:
  - A typed one page SOAP note for one patient observed during the session (different patients must be used by each student).
  - Include two goals for the aforementioned patient, written in the format described in the classroom handouts.
  - Include a one paragraph response about your reaction to the observation. Describe your feelings about the patient you observed, how you interacted with the patient, how what you saw related to what had been covered in class and any issues that required sensitivity on your part as an observer.
- Grading rubric for the SOAP note will be posted on Moodle.
- In the circumstance that wound observation opportunities are not available, students will form a group of 4-5 and find a video showing a wound dressing change. Each group will download their video to a Google doc set up for the class; no duplicate videos.
- After viewing the video, the group will fabricate a possible “back story” for the patient stemming from information discussed in class about common characteristics or factors contributing to the development of a wound. The description should include fabricated wound measurements as a means of comparison for the images seen in the video.
- The group will write a detailed note for the treatment observed in the video including 2 goals and a plan of care (video grading rubric will be posted on Moodle).
- At the end of the semester, each group will show their video and provide a 10 minute presentation about their findings.

### **Group Projects (5%)**

- Working in groups of 2, students are responsible for developing a study tool for different areas covered in various parts of the class as assigned by the instructor. Study tools should be quick and easy methods for recalling important information from lecture and lab sessions pertinent to the care of wounds. Project presentations will be done throughout the semester based on the material being covered. Each student is responsible for providing at least 2 study tools within the semester. Each study tool is worth 2%; final 1% is based on effort/complexity/ease of use by others.

### **Dressing Assignment (5%)**

- Students will be provided with different wound dressings that they must be able to identify. Patient scenarios will be provided and the student will be asked to determine which dressing(s) is/are most appropriate for that patient and why other are not.

## **Student Expectations**

**Academic Conduct:** The course instructor expects students to follow university and department policies and procedures for academic integrity and honesty. Please refer to the university and undergraduate catalog for descriptions of these policies and procedures.

**Accommodations/Disability Support:** Any student with a documented disability who needs academic accommodations is required to speak with the Office of Disability Support to make arrangements. The office is located in room 106 North Foundation Hall. For information or to make an appointment, call (248)370-3266.

**Exam Content:** Written tests are considered to be protected evaluation instruments and consequently:

- May not be reproduced in part or in whole, stored in a retrieval system, or transmitted in any form or by any means, electrical, mechanical, photocopying, or otherwise.
- May be reviewed under supervision only. All examination material must be accounted after an exam as well as during review sessions.
- All notes made during an examination must be on the examination or paper provided by the instructor.
- Students found in possession of unauthorized examination content will receive a group of 0.0 for this course.

**Attendance:** Students are expected to be present and punctual for class. In the case of illness or emergency, contact J. Scully at 248-561-4585 or email at [scully@oakland.edu](mailto:scully@oakland.edu). It is the student's responsibility to obtain missed information.

**Emergency Preparedness:** All students are encouraged to become familiar with the Oakland University Emergency Preparedness Website, Policies and Procedures.

See: <http://www4.oakland.edu/?id=5410&sid=188> In particular, students are strongly encouraged to:

- 1) Take the 15-minute *Violence Prevention Training Course* available on the site
- 2) Sign up to receive text message alerts in the event of a major campus emergency by visiting the **Emergency Notification** Web site (Grizz ID and valid OU e-mail address required)
- 3) Know how to contact the OUPD in the event of an emergency:
  - Call **911** from any campus phone
  - Call (248) 370-3333 from a cell phone
  - Text the dispatch office at **911@oakland.edu**
  - E-mail the dispatch office at **911@oakland.edu**
- 4) Know how to **submit anonymous tips** online in non-emergency situations.