### Course Change Proposal

**Form A**

<table>
<thead>
<tr>
<th>Academic Group (College):</th>
<th>Health and Human Services</th>
<th>Academic Organization (Department):</th>
<th>Physical Therapy</th>
<th>Date:</th>
<th>2/8/2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Course Proposal:</strong></td>
<td>New ___ Change <em>x</em> Deletion ___</td>
<td><strong>Department Chair:</strong></td>
<td>Dr. McGinty</td>
<td><strong>Submitted by:</strong></td>
<td>Dr. Barakatt</td>
</tr>
<tr>
<td><strong>Does this course fulfill a requirement for single-subject or multiple subject credential students?</strong></td>
<td>Yes ___ No <em>x</em></td>
<td><strong>For Catalog Copy:</strong></td>
<td>Yes <em>x</em> No ___</td>
<td><strong>Semester Effective:</strong></td>
<td>Fall ___ Spring <strong>x</strong>, 2012</td>
</tr>
<tr>
<td><strong>CCE (Extension):</strong></td>
<td>Yes ___ No <em>x</em></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):**

| If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr. | Yes ___ No ___ |

**Change from:**

| Subject Area (prefix) & Catalog Nbr (course no.): | PT 206 | **Title:** | Therapeutic Measurements & Techniques | Units: | 4 |

**Change to:**

| Subject Area (prefix) & Catalog Nbr (course no.): | PT 606 | **Title:** | Therapeutic Measurements & Techniques | Units: | 4 |

**JUSTIFICATION:**

This course is being changed as part of the curriculum changes with the new DPT program required for continued accreditation for the program. The course has been upgraded to reflect the expectations in a doctoral program.

**NEW COURSE DESCRIPTION:** (Not to exceed 80 words, and language should conform to catalog copy. See http://www.csus.edu/umanual/acad.htm - Guidelines for Catalog Course Description)

In this course students acquire general physical therapy examination, evaluation and patient handling skills. Students will practice and demonstrate techniques under faculty supervision in the following areas: measurement of vital signs, manual strength testing, testing of joint range of motion and muscle length, patient positioning, transfer techniques, gait training, use of wheelchairs, and use of assistive devices. Open to Physical Therapy majors only.

**Note:**

**Prerequisite:**
- BIO 633 Human Gross Anatomy for Physical Therapists
- PT 600 Pathokinesiology
- PT 608 PT/Patient/Professional Interactions
- PT 630 Pathophysiology
- PT 602 Evidence Informed Practice I

_Enforced at Registration: Yes _x_ No ____

**Corequisite:**
- PT 604 Principles of Human Movement
- PT 614 Neuroscience for Physical Therapists
- PT 618 Foundations for Patient Management
- PT 620 Physical Therapy Interventions I
- PT 622 Evidence Informed Practice II

_Enforced at Registration: Yes _x_ No ____

**Graded:**
- Letter _x_ Credit/No Credit

**Instructor Approval Required?**
- Yes _x_ No ___

**Course Classification (e.g., lecture, lab, seminar, discussion):**
- Lecture and Lab C-02; C16

**Title for CMS (not more than 30 characters):**
- Thor Measurments & Techniqes

**Cross Listed?**
- Yes _x_ No ___

If yes, do they meet together and fulfill the same requirement, and what is the other course?
How Many Times Can This Course be Taken for Credit? 1

Can the course be taken for Credit more than once during the same term? Yes No x
FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at http://www.csus.edu/acaf/example.htm

All course objectives reference the overall educational goals and outcomes of the Department of Physical Therapy. At the conclusion of this course, the student is expected to be able to:

**Goal 1.0:**

**Demonstrate Professional Physical Therapist Effectiveness**

1.1 Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiological factors that lead to impaired body functions and structure.

1.1.1 Discuss the etiology and clinical features of major disorders.

1.1.1.1 Discuss etiologies resulting in loss of motion, flexibility, strength, and ability to transfer may occur resulting in impairments and functional limitations being assessed.

1.1.2 Describe how pathological processes affect normal function.

1.1.2.1 Discuss pathological mechanisms which may result in loss of motion, flexibility, strength, and ability to transfer occurs resulting in impairments and functional limitations being assessed.

1.1.3 Discuss common medical/surgical treatments for major disorders.

1.1.3.1 Discuss surgeries and disorders that pertain to measurement and transfer techniques being assessed.

1.2 Determine the physical therapy needs of any individual seeking services.

1.2.1 Perform an effective and efficient systems review screen.

1.2.1.1 Competently examine and evaluate the vital signs of blood pressure, heart rate, and ventilation rate.

1.2.3 Carry out appropriate and comprehensive patient examinations including tests and measures in a safe and client-centered manner.

1.2.3.1 Competently examine and evaluate muscle strength, muscle length, joint range of motion, and level of independence in transfers and gait.

1.2.5 Perform a physical therapy patient examination using evidenced-based tests and measures.

1.2.5.1 Describe normal range of motion and muscle flexibility values and what values are considered impairments.

1.2.6 Utilize available evidence in interpreting examination findings to inform the patient evaluation.

1.2.6.1 Describe the minimum detectable change and minimum clinically important differences in measurements used when available.

1.2.7 Evaluate data from the patient examination (history, systems review, tests and measures) to make clinical judgments.

1.2.7.1 Recognize levels of impairments in joint range of motion, muscle flexibility, and muscle strength that are considered pathological.

1.2.7.2 Recognize functional limitations in transfers and gait that are considered pathological.

1.2.7.3 Recognize findings in vital signs that are considered pathological.

1.3 Develop a plan of care based on the best available evidence and that considers the patient’s personal and environmental factors.

1.3.1 Prioritize patient/client problems taking into consideration the patient/client’s needs and goals, health condition, physiological and biological mechanisms within the constraints of the environment and resources.

1.3.1.1 Recognize when deviations from normal vital signs warrant referring a patient to a physician.

1.3.2 Write measurable, functional goals that are time referenced with expected outcomes.

1.3.2.1 Write goals and expected outcomes to address each impairment and functional limitation identified on evaluation.

1.3.3 Determine a patient prognosis by predicting the level of optimal improvement in function and the amount of time required to achieve that level.

1.3.3.1 Write a prognosis for each goal identified.

1.5 Demonstrate effective verbal and written communication skills with patients, families, other health care professionals, and the public, to facilitate interventions and interdisciplinary interactions and cooperation.

1.5.3 Demonstrate thorough, concise documentation consistent with current language from the Patient Management Model contained in the most recent edition of the Guide to Physical Therapist Practice.

1.5.3.1 Demonstrate ability to document examination findings, evaluative findings (impairment and functional limitations list), and goals.

1.5.4 Communicate efficiently and effectively with other health care providers involved in the patient/client’s management.

1.5.4.1 Effectively communicate verbally to course instructor examination and evaluative findings concerning muscle length, muscle strength, joint range of motion, functional level in transfers, and vital signs.

**Goal 2.0:**

**Demonstrate Professional Behaviors**

2.5 Demonstrate entry level generic abilities, including:

2.5.1 Professional accountability and commitment to learning.

2.5.1.1 Appropriately completing and promptly turning in assignments.

2.5.3 Effective use of constructive feedback.

2.5.3.1 Adequately revise assignment based on feedback provided.

2.5.4 Effective use of time and resources.

2.5.4.1 Effectively work with colleagues on clinical skills practiced in and outside the laboratory setting.
**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.**

**Assessment Strategies:** A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

<table>
<thead>
<tr>
<th>Assessment Methods</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four quizzes (lowest quiz score dropped)</td>
<td>45%</td>
</tr>
<tr>
<td>Midterm and final practical exams (each 10% of grade)</td>
<td>20%</td>
</tr>
<tr>
<td>(Midterm and final practical exams must be passed to pass the course.)</td>
<td></td>
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<tr>
<td>A passing grade on the practical exam is 80% or above.)</td>
<td></td>
</tr>
<tr>
<td>Final Written Comprehensive Exam</td>
<td>35%</td>
</tr>
</tbody>
</table>

**For whom is this course being developed?**
Majors in the Dept. _x_  Majors of other Depts _x_  Minors in the Dept _x_  General Education _x_  Other _x_

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes _x_ No _x_

If yes, identify program(s): DPT

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes _x_ No _x_

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). Physical Therapy

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

**Approvals:** If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair:</td>
<td>2-16-11</td>
</tr>
<tr>
<td>College Dean or Associate Dean:</td>
<td>2-16-11</td>
</tr>
<tr>
<td>CPSP (for school personnel courses ONLY)</td>
<td>2-16-11</td>
</tr>
<tr>
<td>Associate Vice President</td>
<td></td>
</tr>
<tr>
<td>and Dean for Academic Programs</td>
<td></td>
</tr>
</tbody>
</table>

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

9/10/2008
PT 606 - Therapeutic Measurements & Techniques

Fall Semester

**COURSE CREDIT:** 4 units (2 hour lecture, 6 hours lab)

**INSTRUCTORS:** To be announced

**LOCATION:** TBA

**TIME:** TBA

**COURSE DESCRIPTION:**
In this course students acquire general physical therapy examination, evaluation and patient handling skills. Students will practice and demonstrate techniques under faculty supervision in the following areas: measurement of vital signs, manual strength testing, testing of joint range of motion and muscle length, patient positioning, transfer techniques, gait training, use of wheelchairs, and use of assistive devices. **Open to Physical Therapy majors only.**

**PREREQUISITES:**
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PT 600 Pathokinesiology  
PT 608 PT/Patient/Professional Interactions  
PT 630 Pathophysiology  
PT 602 Evidence Informed Practice I

**CO-REQUISITES:**
PT 604 Principles of Human Movement  
PT 614 Neuroscience for Physical Therapists  
PT 618 Foundations for Patient Management  
PT 620 Physical Therapy Interventions I  
PT 622 Evidence Informed Practice II

**REQUIRED TEXTS:**

**COURSE OBJECTIVES:**
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At the completion of this course, the student is expected to be able to:

**Goal 1.0:** Demonstrate Professional Physical Therapist Effectiveness
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2.5.3.1 Adequately revise assignment based on feedback provide

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2.5.4.1 Effectively work with colleagues on clinical skills practiced in and outside the laboratory setting.

**TEACHING STRATEGIES AND LEARNING ACTIVITIES:**

1. Combination of lecture and laboratory demonstrations/exercises
2. Assigned readings/independent study
3. Laboratory practice of palpatory and examination techniques
4. Guest lecturer(s) from scientific and/or medical community

**GRADING PROCEDURE:**

All quizzes and exams will be in a multiple choice format, covering material from lectures, handouts, labs, and assigned readings from text. The midterm practical exam will cover material from the first half of the semester, and the final practical exam will cover material from the second half of the semester. The comprehensive final written exam will cover all information from weeks 1-15 pertaining primarily to manual muscle testing and goniometry/range of motion. Always bring a scantron form (e.g., FORM No. 882-ES or 882-E) to each quiz and the final exam. Grades will be awarded on the following bases:
Grading:
Four written quizzes (all quizzes weighted equally and lowest quiz score dropped).............45%
Midterm and final practical exams (each 10% of grade).........................................................20%
(Midterm and final practical exams must be passed to pass the course. A passing grade on the
practical exam is 80% or above.)
Final Written Comprehensive Exam ..........................................................................................35%

\[ \geq 93.0\% = A; \quad 93.0\% > A- \geq 90.0\%; \quad 90.0\% > B+ \geq 87.0\%; \quad 87.0\% > B \geq 83.0\%; \]
\[ 83.0\% > B- \geq 80.0\%; \quad 80.0\% > C+ \geq 77.0\%; \quad 77.0\% > C \geq 70.0\%; \quad 70.0\% > D \geq 60.0\%; \]
\[ < 60.0\% = F \]

Laboratory:
Course quizzes and exams will be designed to integrate information from both lecture and lab.
Students will perform examination techniques on other students, evaluate their findings
document impairments, functional limitations, and goals. Laboratory sessions will help prepare
students for midterm and final practicum exams. Laboratory attire includes shorts and bathing
suit top or sport bra for females, and shorts for males. Keep lab cloths in assigned locker so they
are always available for each class session. Lab attendance, participation, and appropriate attire
are mandatory - failure to comply may lead to disciplinary action as determined by the instructor.

Attendance: Daily attendance and timeliness is expected. Courtesy and professional
responsibility requires notification of the instructor for any absence in advance. Failure to
notify the professor of an absence can result in lowering your participation grade and is
considered unprofessional. Students are responsible for any missed work and may be required to
complete make-up assignments.

Behavioral expectations: Students are responsible for appropriate behaviors as defined by the
generic abilities. Failure to comply with behavioral expectations during class may result in a
student first being warned that behavior is inappropriate, then, if inappropriate behavior
continues, a student may be asked to leave a class. Repeated failure to comply with behavioral
expectations can lead to failure in the course. Cell phones and beepers should be off or silent (set
to vibration mode) during the class. No text messaging is permitted in class.

Special accommodations: During the course of the year, some students may utilize prearranged
accommodations. If you are a student with a learning disability, physical disability, or other
special needs, please let me know as soon as possible if you need special accommodation. These
kinds of confidential discussions are best handled during my office hours or by special
appointment. You can expect confidentiality and cooperation regarding any circumstances and
needs that have been verified though the Office of Services to Students with Disabilities
(SSWD).
**TENTATIVE SCHEDULE:** Depending on the frequency of the meeting format, you may need to change this tentative schedule table to meet the specific needs of a given class.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week #1</td>
<td>Introduction, vital signs, positioning and draping, transfers training (bed mobility, supine to supine, sliding board transfers, patient lift transfers), tilt table.</td>
<td>Minor &amp; Minor: Chapters 5, 7, 8</td>
</tr>
<tr>
<td>Week #2</td>
<td>Transfer training (supine to sit, sit to stand, sit to sit, wheelchair transfers, pole transfers)</td>
<td>Minor &amp; Minor: Chapters 5, 7, 8</td>
</tr>
</tbody>
</table>
| Week #3 | Introduction to goniometry  
Goniometry of the lumbar and thoracic spines.  
Introduction to manual muscle testing  
Manual muscle testing of the lumbar and thoracic spine region | Norkin & White: Chapters 1, 2, 3, 12  
Hislop & Montgomery: Chapters 1, 3                                        |
| Week #4 | Goniometry, muscle length testing and manual muscle testing of the hip  
**Quiz #1 (covering material up to and including the hip)**  
Goniometry, muscle length testing and manual muscle testing of the knee | Norkin & White: Chapter 8  
Hislop & Montgomery: Chapter 5                                              |
|         | **Practical Exams** – transfers, assistive devices, wheelchairs, and gait training  
**Practical Exams** – manual muscle testing, muscle length testing and goniometry for Thoracic & Lumbar Spine, Hip, Knee, Ankle, & Foot | Norkin & White: Chapter 9  
Hislop & Montgomery: Chapter 5                                              |
| Week #5 | Wheelchair transfers; wheelchair training, measuring, & fitting, gait training, assistive devices                                                                                                      | Minor & Minor: Chapters 3, 4, 6, 7, 10                                     |
| Week #6 | Goniometry, muscle length testing and manual muscle testing of the ankle and foot  
**Quiz #2 (covering material from last quiz up to and including the ankle and foot)**                                                                 | Norkin & White: Chapter 10  
Hislop & Montgomery: Chapter 5                                              |
| Week #7 | **Practical Exams** – transfers, assistive devices, wheelchairs, and gait training  
**Practical Exams** – manual muscle testing, muscle length testing and goniometry for Thoracic & Lumbar Spine, Hip, Knee, Ankle, & Foot | Norkin & White: Chapter 11  
Hislop & Montgomery: Chapter 2                                              |
| Week #8 | Goniometry, muscle length testing and manual muscle testing of the cervical spine                                                                                                                        | Norkin & White: Chapter 13;  
Hislop & Montgomery: Chapter 7  
Hislop & Montgomery: Chapter 7  
http://library.med.utah.edu/neurologicexam/html/cranialnerve_normal.html |                                                                 |
| Week #9 | Range of motion and manual muscle testing of the temporomandibular joint  
Strength assessment of muscles of the face innervated by cranial nerves                                                                                                                             | Norkin & White: Chapter 4  
Hislop & Montgomery: Chapter 4                                              |
| Week #10| **Quiz #3 (covering material from last quiz up to and including the muscles of the face)**  
Goniometry, muscle length testing and manual muscle testing of the shoulder complex                                                                                                          | Norkin & White: Chapter 4  
Hislop & Montgomery: Chapter 4                                              |
| Week #11| Goniometry, muscle length testing and manual muscle testing of the elbow complex                                                                                                                      | Norkin & White: Chapter 5  
Hislop & Montgomery: Chapter 4                                              |
| Week #12| Goniometry, muscle length testing and manual muscle testing of the wrist and hand.                                                                                                                      | Norkin & White: Chapter 6, 7  
Hislop & Montgomery: Chapter 4                                              |
| Week #13| **Quiz #4 (covering material from last quiz up to and including the wrist and hand)**  
Standard precautions, communicable diseases                                                                                                                                                    | Minor & Minor: Chapter 4                                                  |
| Week #14 | Review for Practical Examination  

Practical Examination (covering material since the midterm practical exam) |
| --- | --- |
| Week #15 | Intensive Care Unit introduction  

Review for Final Examination |
|  | Handouts provided in class |
| Week #16 | Final examination |

STUDENTS SHOULD READ AND BECOME FAMILIAR WITH THE UNIVERSITY’S ACADEMIC HONESTY, POLICY & PROCEDURES WHICH CAN BE FOUND AT: www.csus.edu/admbus/umanual/UMA00150.htm

The following are direct quotes from the first sections of that document:

“"The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento (CSUS) expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades. CSUS is a publicly-assisted institution legislatively empowered to certify competence and accomplishment in general and discrete categories of knowledge. The President and faculty of CSUS are therefore obligated not only to the world at large but also to California to guarantee that substantive knowledge is actually acquired and the ability to acquire it is actually demonstrated by those to whom they assign grades and whom they recommend for degrees. Academic dishonesty defrauds all those who depend upon the integrity of the University, its courses and its degrees. This fraud is accomplished to the extent that faculty, students or campus employees knowingly or unwittingly allow academic dishonesty to work its deception.”

“...Plagiarism is a form of cheating. At CSUS plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person’s contribution. Regardless of the means of appropriation, incorporation of another’s work into one’s own requires adequate identification and acknowledgement. Plagiarism is doubly unethical because it deprives the author of rightful credit and gives credit to someone who has not earned it. Acknowledgement is not necessary when the material used is common knowledge.”
1) Which of the following correctly identifies assistive devices for ambulating in a rank order from most stable to least stable?
   a. Parallel bars, walker, quad cane, axillary crutches, single point cane
   b. Parallel bars, axillary crutches, walker, quad cane, single point cane
   c. Parallel bars, walker, axillary crutches, quad cane, single point cane
   d. Walker, parallel bars, axillary crutches, quad cane, single point cane
   e. Axillary crutches, parallel bars, walker, quad cane, single point cane

2) Which of the following statements are true concerning providing instructions to a patient who is getting up for the first time following a total hip replacement?
   a. Long, elaborate explanations are desired to make sure the patient understands all of the mechanical advantage considerations with various limb positioning during a transfer, and problems that might arise in performing a transfer.
   b. The patient should be told, “be sure to keep your hip from flexing more than 90° and adducting past 0°.”
   c. It is more effective to provide instructions to the patient before she starts walking rather than while she is walking.
   d. Both b and c
   e. All of the above

3) Which of the following assistive devices are appropriate for patients that have a “toe touch weight bearing” status?
   a. Single point cane
   b. Quad cane
   c. Axillary crutches
   d. Pick-up walker
   e. Both c and d

4) A 67 year-old female recently underwent a left hip replacement. This patient has an order from the doctor for gait training with weight bearing as tolerated on the left lower extremity. The caregiver and the patient’s family members comment that the patient has an extreme fear of falling and hesitates to put any weight on the left lower extremity. The best choice to make the patient feel the MOST secure and stable during walking is which of the following:
   a. A quad cane & two persons to guard
   b. Parallel bars, a wheel chair to follow behind, & two persons assist
   c. A front wheel walker and two persons to guard
   d. A standard walker and two persons to guard

5) Which of the following gait pattern combinations are most effective in allowing a patient to ambulate at a higher speed?
   a) A three point, step-to gait pattern with two forearm crutches
   b) A three point, swing-through gait pattern with two crutches
   c) A four point, step-to gait pattern with two crutches
   d) A four point, step-through gait pattern with two canes
6) Which of the following are true about desk armrests on wheelchairs?
   a. They allow you to get closer to a table or desk than full length arm rests
   b. They allow for an easier transfer than full length arm rests
   c. They are not removable from the wheel chair
   d. Both a and c
   e. All of the above

7) What is the proper procedure for measuring the height that the back of a wheelchair should be for a specific patient?
   a. With the patient sitting, measure from the sitting surface to the axilla, then add the height of the cushion
   b. With the patient sitting, measure from the sitting surface to the axilla
   c. With the patient sitting, measure from the sitting surface to the inferior angle of the scapula, then add the height of the cushion
   d. With the patient sitting, measure from the sitting surface to the inferior angle of the scapula, then subtract the height of the cushion
   e. With the patient standing, measure from the gluteal fold to the spine of the scapula, then divide the circumference of the cushion by the diagonal length before subtracting it from the total.

8) Which of the following are written in the assessment portion of the S.O.A.P. note?
   a. Patient is 2-weeks status post right total knee replacement
   b. Knee flexion AROM = 0°-75°
   c. Patient Problem - Limited knee flexion ROM
   d. Increase knee flexion ROM to 0°-90° in 2 weeks and 0°-125° in 6 weeks
   e. Both c & d

9) What type of patient is a tilt table appropriate for?
   a. Someone who gets dizzy or faints when they sit up from a reclined position
   b. Someone who has been bed bound for a long time resulting in orthostatic hypotension
   c. Someone whose has not bore weight on his or her lower extremities for a prolonged period of time
   d. All of the above
   e. Both a and b

10) If a patient is walking with four point gait, he or she is most likely:
    a. Walking without an assistive device
    b. Using forearm crutches
    c. Using a pick up walker
    d. Propelling themselves in a wheelchair
    e. Walking in a swing-through gait pattern

11) Which of the following is a reason (or are reasons) some patients may have a wheelchair that has a back support that tilts back and/or has an entire seating mechanism that tilts back?
    a. To change the pressure distribution to different areas of the buttocks, posterior thighs and back
    b. To accommodate range of motion limitations
    c. To allow the patient to propel the wheelchair at a faster rate of speed
    d. All of the above
    e. Both a and b

12) You are teaching a patient to walk with crutches and notice that the crutches she is walking with are adjusted too short for her. You know this because you:
    a. Pull out your goniometer and measure her elbow flexion at 50°
    b. Pull out your goniometer and measure her elbow flexion at 0°
    c. Place 4 fingers in between her axilla and the top of her crutches
    d. Count the number of holes from the bottom of the crutches the crutch leg peg resides in
    e. Note that she is taking extra long steps
13) When guarding a patient ambulating on stairs with axillary crutches, which of the following is true?
   a. The therapist should be behind the patient on the way up the stairs and on the way down the stairs.
   b. The therapist should be ahead of the patient on the way up the stairs and on the way down the stairs
   c. The therapist should always be down stairs from the patient
   d. The therapist should always be upstairs from the patient
   e. There is no preferred position for the therapist to be relative to the patient

14) When transferring from sitting to standing out of a wheelchair, which of the following is appropriate for a patient to do with their feet?
   a. Pull his feet as far back as practical to improve ease of getting the center of gravity over the feet
   b. Put his feet in a slight stride position to increase base of support
   c. Put his feet as far forward as possible to insure the feet do not get tangled in the front wheels of the wheelchair
   d. Keep the feet as close together as possible to give the assistive device as much room as possible
   e. Both a and b

15) Which of the following statements are false?
   a. For reimbursement purposes, documentation should contain a list of problems, the goals associated with each problem, and the plan of treatment to be used to achieve each goal
   b. Documenting patient goals is not important, only documenting physical impairments found on examination
   c. There is a wheelchair that can be propelled with only one upper extremity and no feet or motor
   d. To determine the proper width of a seat of a wheelchair, the therapist measures the patient’s hip or thigh width and subtract two inches
   e. Both b and d

16) Which of the following are written in the plan portion of the S.O.A.P. note?
   a. Patient complains of chronic low back pain
   b. Hip flexion on right is 90º with pain at end range
   c. Patient is unable to sit for prolonged period required by work
   d. Increase sitting tolerance to 2 hours within 4 weeks
   e. None of the above

17) Which of the following statements is true about the wheelchair of a patient who is one day post-op total hip replacement?
   a. Use of a standard wheelchair is recommended because it can be folded up
   b. Use of a fixed frame wheelchair is necessary so it doesn’t fold up when the patient is transferring
   c. Use of a reclining-back wheelchair is indicated to ensure excessive hip flexion does not occur
   d. An electric wheelchair is required so the patient does not exert themselves during transport
   e. None of the above

18) Which of the following best describes the proper patient positions for measuring range of motion (ROM) and grade 2 manual muscle testing (MMT) for knee flexion?
   a. ROM: Patient prone with hips fully extended at end range knee flexion
      MMT: Patient prone with the knee flexed throughout its available range
   b. ROM: Patient prone with hips fully extended at end range knee flexion
      MMT: Patient side-lying with the knee flexed throughout its available range
   c. ROM: Patient supine with hip flexed approximately 90º at end range knee flexion
      MMT: Patient prone with the knee flexed throughout its available range
   d. ROM: Patient supine with hip flexed approximately 90º at end range knee flexion
      MMT: Patient side-lying with the knee flexed throughout its available range
19) Which of the following is true regarding knee flexion range of motion needed for functional activities?
   a. Approximately 60° of knee flexion is needed for normal walking
   b. Approximately 90° of knee flexion is needed for ascending and descending stairs
   c. Approximately 90° of knee flexion is needed for rising from or sitting down to a chair
   d. Both a and c
   e. All of the above

20) In performing the manual muscle test shown below a physical therapist observes their patient’s leg rotates at the knee resulting in the foot pointing laterally (outward). Which of the following muscles may cause this action while performing this test?
   a. Biceps femoris
   b. Semimembranosus and semitendinosus
   c. Sartorius and gracilis
   d. Both b and c

21) Which of the following best describes the proper patient positions for measuring range of motion (ROM) and grade 3 manual muscle testing (MMT) for ankle dorsiflexion?
   a. ROM: Patient supine with hip and knee fully extended at end range dorsiflexion
      MMT: Patient side-lying with the knee bent at end range dorsiflexion
   b. ROM: Patient supine with hip and knee fully extended at end range dorsiflexion
      MMT: Patient short sitting with the knee bent at end range dorsiflexion
   c. ROM: Patient short sitting with the knee bent at end range dorsiflexion
      MMT: Patient side-lying with the knee bent at end range dorsiflexion
   d. ROM: Patient short sitting with the knee bent at end range dorsiflexion
      MMT: Patient short sitting with the knee bent at end range dorsiflexion

22) Which of the following best describes the proper patient position for measuring muscle length testing for the gastrocnemius?
   a. Patient supine with the hip and knee fully extended at end range plantar flexion
   b. Patient supine with the hip and knee fully extended at end range dorsiflexion
   c. Patient supine with the hip and knee flexed approximately 45° at end range plantar flexion
   d. Patient supine with the hip and knee flexed approximately 45° at end range dorsiflexion
23) A physical therapist instructs a patient to turn her foot down and in and hold that position while the therapist attempts to turn the foot up and out (see figure below). Which of the following best represents the muscle being tested, and what manual muscle testing grade is assigned if the therapist is unable to move the patient’s foot up and out using moderate resistance, and is able to move the foot with maximum resistance?
   a. Tibialis posterior is being tested, and a manual muscle testing grade of 4 is assigned
   b. Tibialis posterior is being tested, and a manual muscle testing grade of 5 is assigned
   c. Tibialis anterior is being tested, and a manual muscle testing grade of 4 is assigned
   d. Tibialis anterior is being tested, and a manual muscle testing grade of 5 is assigned

24) Which of the following muscles are being tested in which therapist applies a force on the 1st proximal phalanx (in the direction shown in the figure below) in attempting to cause movement at the 1st MTP joint?
   a. Flexor hallucis brevis
   b. Flexor hallucis longus
   c. Extensor hallucis brevis
   d. Extensor hallucis longus

25) In the manual muscle test shown below, which of the following best represents the muscle being tested, and what manual muscle testing grade is assigned if the patient is able to perform 8 consecutive repetitions through a full range of motion?
   a. Gastrocnemius is being tested, and a manual muscle testing grade of 3 is assigned
   b. Gastrocnemius is being tested, and a manual muscle testing grade of 4 is assigned
   c. Soleus is being tested, and a manual muscle testing grade of 3 is assigned
   d. Soleus is being tested, and a manual muscle testing grade of 4 is assigned

BONUS: On the back side of your scantron form in the blank area at the top, list eight different muscles that help cause or control the movements shown in the figure above in question #25, and next to each muscle list the nerve that innervates that muscle (must get all parts correct to receive credit).
PT 606 QUIZ #2 ANSWER SHEET

1. c
2. c
3. e
4. b
5. b
6. a
7. d
8. e
9. d
10. b
11. e
12. c
13. c
14. e
15. e
16. e
17. c
18. d
19. e
20. a
21. d
22. b
23. a
24. a
25. a

BONUS:

1. Gastrocnemius (tibial nerve)  5. Flexor hallucis longus (tibial nerve)
2. Soleus (tibial nerve)  6. Flexor digitorum longus (tibial nerve)
3. Tibialis posterior (tibial nerve)  7. Peroneus longus (superficial peroneal nerve)
4. Plantaris (tibial nerve)  8. Peroneus brevis (superficial peroneal nerve)
PT606 - Therapeutic Measurements & Techniques
Items to be tested on the midterm practical exam covering positioning, transfers, gait, and assistive devices.

Transfers: (Be sure to practice instructing patient as well as performing activity yourself)

1) Dependent standing pivot.

2) Sliding board wheelchair to chair w/ minimal assist (involved side will be indicated). Emphasize patient instruction.

3) Assist to front edge of chair with minimal assist.

4) Assisted standing pivot w/ minimal assist (involved side will be indicated) – know when to guard the involved side vs. the uninvolved side.

5) Sit to standing in a walker (and back). (Wheel chair holding technique and walker holding technique)

6) Wheelchair or chair to treatment table with minimal assist with and without step stool (involved side will be indicated).

7) Turn patient from supine to prone and back (involved side will be indicated).

Gait: (Fit crutches, cane, and walker) (Techniques below on stairs where applicable) (Practice instructing patient in activity)

1) 50% partial weight bearing left LE 3 point gait with FWW

2) Toe-touch & non-weight bearing right LE 3 point gait with PUW

3) 4 point gait with 2 axillary crutches/forearm crutches

4) 2 point gait with only one cane (R UE) step to and step through

5) Swing-to-gait with PUW

6) 3 point gait with axillary crutches non-weight bearing (step-to & step-through)

Wheelchairs

1) Fit a wheel chair
# PT 606 Therapeutic Measurements & Techniques

## Midterm Practicum Examination Score Sheet

Bed Mobility, Transfers, Gait with Assistive Devices, Wheelchairs

<table>
<thead>
<tr>
<th>Bed Mobility, Transfer or Wheelchair Technique:</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist introduction to patient, establishing activity to be done</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Brief description of activity to patient</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Instructions to patient</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Position of patient</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Position of therapist</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Activity performance</td>
<td>(   ) points</td>
</tr>
<tr>
<td>Patient Reassessment</td>
<td>(   ) points</td>
</tr>
</tbody>
</table>

## Gait Training Activity:

<table>
<thead>
<tr>
<th>Gait Training Activity:</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist introduction to patient, establishing activity to be done</td>
<td>(   ) points</td>
</tr>
<tr>
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<td>Patient Reassessment</td>
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</tbody>
</table>

Percent Grade: ________/28 = %

**Scoring System:** 2 points (performed flawlessly); 1 point (needs improvement); 0 points (unsatisfactory)