PT 632: PHARMACOLOGY FOR PHYSICAL THERAPISTS

In Workflow

- 1. PT Committee Chair (kbaxter@csus.edu)
- 2. PT Chair (mckeough@csus.edu;%20crummetth@csus.edu)
- 3. HHS College Committee Chair (knam@csus.edu)
- 4. HHS Dean (maguirem@csus.edu)
- Academic Services (torsetj@csus.edu;%20212408496@csus.edu;%20cnewsome@skymail.csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (212408496@csus.edu;%20torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- 10. Registrar's Office (wlindsey@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Thu, 12 Dec 2019 17:40:08 GMT

Heide Katrin Mattern-Baxter (kbaxter): Approved for PT Committee Chair

2. Fri, 13 Dec 2019 19:26:02 GMT

Heather Crummett (crummetth): Approved for PT Chair

3. Tue, 04 Feb 2020 23:23:06 GMT

Kisun Nam (knam): Rollback to Initiator

4. Wed, 26 Feb 2020 19:42:42 GMT

Heide Katrin Mattern-Baxter (kbaxter): Rollback to Initiator

5. Wed, 26 Feb 2020 21:18:55 GMT

Heide Katrin Mattern-Baxter (kbaxter): Approved for PT Committee Chair

6. Wed, 26 Feb 2020 21:49:59 GMT

Michael Mckeough (mckeough): Approved for PT Chair

7. Tue, 03 Mar 2020 16:48:42 GMT

Kisun Nam (knam): Approved for HHS College Committee Chair

8. Tue, 03 Mar 2020 18:32:45 GMT

Mary Maguire (maguirem): Approved for HHS Dean

9. Wed, 08 Apr 2020 18:31:19 GMT

Janett Torset (torsetj): Approved for Academic Services

Date Submitted: Wed, 26 Feb 2020 20:58:39 GMT

Viewing:PT 632 : Pharmacology for Physical Therapists Last edit:Wed, 26 Feb 2020 20:58:37 GMT

Changes proposed by: Heather Crummett (210174092)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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Catalog Title:

Pharmacology for Physical Therapists

Class Schedule Title: Pharmacology for PT

Academic Group: (College)
HHS - Health & Human Services

Academic Organization: (Department)

Physical Therapy

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective:

Spring 2021 (2021/2022 Catalog)

Subject Area: (prefix) PT - Physical Therapy

Catalog Number: (course number)

632

Course ID: (For administrative use only.)

201780

Units:

2

In what term(s) will this course typically be offered?

Fall, Spring

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course?

Nο

This course complies with the credit hour policy:

Yes

Justification for course proposal:

The pre and co-requisites for all summer year 1 and fall year 2 courses in the program had to be changed because Geriatrics (PT 636) was moved from the summer to the fall semester.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

This course provides a study of pharmacological agents and their effects on the musculoskeletal, neuromuscular, cardiopulmonary and integumentary systems. Particular emphasis is placed on recognition of adverse reactions and side effects of various drugs as they affect patients receiving physical therapy.

Are one or more field trips required with this course?

No

Fee Course?

Nο

Is this course designated as Service Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

Νo

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

Open to Physical Therapy Majors only

Does this course have prerequisites?

Yes

Prerequisite:

BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 630.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

Yes

Corequisite:

PT 634, PT 638.

Corequisites Enforced at Registration?

Yes

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Lecture

Lecture Classification

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

Lecture Units

2

Is this a paired course?

No

Is this course crosslisted?

Νo

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

Nc

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."

At the conclusion of this course, the student is expected 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.
- 1.1.4 Analyze the effects of pharmacological agents on human function.
- 1.1.4.1 Describe the primary pharmacokinetic factors involved in drug therapy (drug administration, absorption, distribution, interaction, and elimination).
- 1.1.4.2 Draw a dose response curve for drugs, and indicate the threshold dose and ceiling dose.
- 1.1.4.3 Describe the primary methods of internal drug administration (injection, inhalation, topical, transdermal, others).
- 1.1.4.4 Describe how drug absorption and distribution can be affected by specific physical therapy interventions such as thermal agents, massage, and exercise.
- 1.1.4.5 List the primary organs and tissues in the body that are responsible for drug metabolism.
- 1.1.4.6 List the factors that can alter normal pharmacokinetics (age, disease, drugs, genetics, nutrition, chemicals, body composition, and gender).
- 1.1.4.7 Explain how altered pharmacokinetics may lead to a decrease or an increase in drug effects, and how these effects may be recognized in patients/clients receiving physical therapy.
- 1.1.4.8 Recognize and appraise conditions reflecting critical (life-threatening) drug interactions in patients/clients receiving physical therapy.
- 1.1.4.9 Know and understand the mechanism of actions of various drugs commonly used by patients receiving physical therapy.
- 1.1.4.10 Identify and describe, in writing, general principals of pharmacology as they relate to clinical decision making in the physical therapy management of a patient.
- 1.1.4.11 Identify in writing the possible effects of various drug actions on physical therapy outcomes.
- 1.2 Determine the physical therapy needs of any individual seeking services.
- 1.2.2 Review pertinent medical records and conduct a comprehensive patient interview.
- 1.2.2.1 Know and understand the mechanism of actions of various drugs commonly used by patients receiving physical therapy
- 1.3 Develop a plan of care based on the best available evidence and that considers the patient's personal and environmental factors
- 1.3.8 Progress the plan of care by making ongoing adjustments to interventions.
- 1.3.8.1 Monitor and adjust the patient's plan of care in response to interpretation of pharmacological principles

- 1.3.8.2 Explain how altered pharmacokinetics may lead to a decrease or an increase in drug effects, and how these effects may be recognized in patients/clients receiving physical therapy.
- 1.3.8.3 Recognize and appraise conditions reflecting critical (life-threatening) drug interactions in patients/clients receiving physical therapy.
- 1.3.8.4 Know and understand the mechanism of actions of various drugs commonly used by patients receiving physical therapy.
- 1.3.8.5 Identify and describe, in writing, general principals of pharmacology as they relate to clinical decision making in the physical therapy management of a patient.
- 1.3.8.6 Identify in writing the possible effects of various drug actions on physical therapy outcomes.
- 1.3.8.7 Monitor and adjust the patient's plan of care in response to interpretation of pharmacological principles.
- Goal 3.0: Demonstrate professional behaviors by reflecting on personal and professional development, and by integrating cultural, ethnic, age, economic, and psychosocial

considerations in the communication and delivery of clinical services.

- 3.1 Recognize cultural, ethnic, age, economic, and psychosocial differences and apply a humanistic and holistic approach to the delivery of a clinical service.
- 3.1.1 Practice physical therapy demonstrating cultural competence with all individuals and groups.
- 3.1.2 Work effectively with challenging patients.
- 3.1.3 Respect personal space of patients/clients and others.
- 3.1.4 Demonstrate behaviors that are non-judgmental with regards to patients/clients' lifestyles.
- 3.1.5 Respect roles of support staff and delegate appropriately.
- 3.2 Communicate effectively for varied audiences and purposes.
- 3.2.1 Demonstrate effective interpersonal (verbal, nonverbal, electronic) communication skills considering the diversity of populations and environments.
- 3.2.2 Facilitate therapeutic communication and interpersonal skills.
- 3.2.3 Discuss difficult issues with sensitivity and objectivity.
- 3.2.4 Appropriately utilize communication technology efficiently, professionally, and effectively.
- 3.2.5 Respect roles of support staff and communicate appropriately.
- 3.3 Participate in professional activities that serve the community and advance the profession of physical therapy.
- 3.3.1 Recognize the importance of participation in professional association activities.
- 3.3.2 Recognize one's role as a member and leader of the health care team.
- 3.4 Recognize the need for personal and professional development.
- 3.4.1 Participate in self-assessment to improve clinical and professional performance.
- 3.4.2 Welcome and seek new learning opportunities.
- 3.4.3 Assume responsibility for professional lifelong learning.
- 3.4.4 Accept responsibility and demonstrate accountability for professional decisions.
- 3.4.5 Recognize own biases and suspend judgments based on biases.
- 3.5 Demonstrate entry level generic abilities, including:
- 3.5.1 Professional accountability and commitment to learning.
- 3.5.2 Recognition of one's own limitations.
- 3.5.3 Effective use of constructive feedback.
- 3.5.4 Effective use of time and resources.
- 3.5.5 Demonstrate integrity, compassion, and courage in all interactions.
- Goal 4.0: Practice in an ethical and legal manner through the consistent integration of sound decision-making with respect to established ethical, legal and professional standards.
- 4.1 Practice physical therapy in a manner consistent with established legal and professional standards.
- 4.1.1 Demonstrate awareness of and adherence to state licensure regulations.
- 4.1.2 Practice within all applicable regulatory and legal requirements.
- 4.1.3 Demonstrate the ability to search and find information about laws and regulations pertaining to physical therapy practice from state and federal electronic sources.
- 4.1.4 Demonstrate accountability by adhering to laws and regulations governing physical therapy fiscal management.
- 4.2 Practice in a manner consistent with the professional code of ethics
- 4.2.1 Demonstrate knowledge and application of ethical decision-making.
- 4.2.2 Treat patients/clients within scope of practice, expertise and experience.
- Goal 5.0: Demonstrate the critical evaluation, interpretation and application of the scientific and professional literature to inform independent judgments and clinical decision-making, research and education.
- 5.1 Apply basic principles of statistics and research methodologies within the practice of physical therapy.
- 5.1.1 Formulate and reevaluate positions based on the best available evidence.
- 5.1.2 Evaluate the efficacy and efficiency of physical therapy procedural interventions.

5.1.3 Critically evaluate and interpret professional literature as it pertains to practice, research, and education.

5.1.4 Utilize contemporary technology consistently to access evidence.

5.2 Contribute to the body of knowledge of physical therapy.

5.2.1 Participate in, plan, and/or conduct clinical, basic, or applied research.

5.2.2 Disseminate the results of scholarly activities.

Attach a list of the required/recommended course readings and activities:

PT 632_Syllabus - Revised2020.pdf

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.

ASSESSMENTS & ASSIGNMENTS

Assessment Type weight

Exam 1 [course objectives: 1, 3, 4 & 5] - 30% Exam 2 [course objectives: 1, 3, 4 & 5] - 35% Exam 3 [course objectives: 1, 3, 4 & 5] - 35%

Student presentation [course objectives: 1, 4 & 5] - credit/no credit

Examinations:

There will be three examinations in the course. Exams may contain essay, short answer, multiple choices, matching and true/false question formats. Exams may include patient cases and application of the course material to specific patient problems. You may not leave the room once the test has been distributed. All books, backpacks, etc. must be placed at the front of the room. The use of any electronic media during test times is prohibited.

Each exam must be passed with a grade >80%. Any student failing to meet the >80% standard will be required to submit to remediation. The form of the remediation will be determined by the instructor. Following successful completion of remediation the score for that exam will be changed to 80%. If a student achieves <80% on more than one exam they are still required to undergo remediation for each exam but only one grade will be changed. Student Presentation

Each student will choose a topic from a list of complementary and alternative therapies (CAT) and deliver a 10 min oral presentation on the pharmacodynamics and pharmacokinetics of the CAT including: indications, side effects, drug interactions, contraindications, and impact on physical therapy interventions (if any). A sign-up sheet will be used to prevent duplication.

GRADING SCALE

Grade Percent

A 92.0 - 100%

A- 90.0 - <92.0%

B+ 88.0 - <90.0%

B 80.0 - <88.0%

B- 78.0 - <80.0%

0.750 7000

C+ 75.0 - <78.0% C 70.0 - <75.0%

F below 70.0%

Is this course required in a degree program (major, minor, graduate degree, certificate?)

Yes

Has a corresponding Program Change been submitted to Workflow?

Nο

Identify the program(s) in which this course is required:

Programs:

Doctor of Physical Therapy

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Doctorate Learning Goal(s):

Critical thinking/analysis Information literacy Disciplinary knowledge Intercultural/Global perspectives Professionalism

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Please attach any additional files not requested above:

DPT-SLO_Letter.pdf

Reviewer Comments:

Kisun Nam (knam) (Tue, 04 Feb 2020 23:23:06 GMT):Rollback: Committee approved the form with pending changes. Please refer to the discussion during meeting. Committee members from the department will provide the detailed changes to the chair/author. Once re-submitted, the chair may approve the proposal immediately.

Heide Katrin Mattern-Baxter (kbaxter) (Wed, 26 Feb 2020 19:42:42 GMT):Rollback: as discussed

Key: 4082