

Request for Graduate Course Change

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. **The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.**

College: COHP

Dept/Division: Physical Therapy

Current Alpha Designator/Number: PT 747

Contact Person: Penny Kroll, PT, PhD

Phone: 304-606-5614

CURRENT COURSE DATA:

Course Title: Applied Exercise Physiology and Therapeutic Exercise

Alpha Designator/Number:

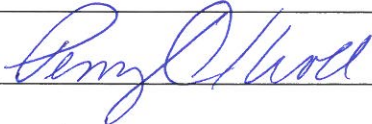

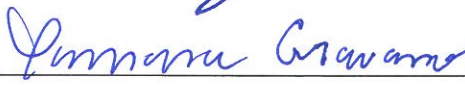
P	T	7	4	7					
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Title Abbreviation:

P	h	a	r	m	a	c	o	l	o	g	y		i	n		R	e	h	a	b				
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1. Complete this **five** page form in its entirety and route through the departments/committees below for changes to a course involving: course title, alpha designator, course number, course content, credit hours, or catalog description.
2. If this change will affect other departments that require this course, please send a memo to the affected department and include it with this packet, as well as the response received from the affected department.
3. If the changes made to this course will make the course similar in title or content to another department's courses, please send a memo to the affected department and include it with this packet as well as the response received from the affected department.
4. List courses, if any, that will be deleted because of this change (*must submit course deletion form*).
5. If the faculty requirements and/or equipment need to be changed upon approval of this proposal, attach a written estimate of additional needs.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head <u></u>	Date <u>3/23/15</u>
Registrar <u></u>	Date <u>3/23/15</u>
College Curriculum Chair <u></u>	Date <u>4/3/15</u>
Graduate Council Chair _____	Date _____

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Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head <u></u>	Date <u>3/23/15</u>
Registrar <u></u>	Date <u>3/23/15</u>
College Curriculum Chair _____	Date _____
Graduate Council Chair _____	Date _____

College: COHP Department/Division: School of Physical Therapy Alpha Designator/Number: PT 747

Change in CATALOG TITLE: ☐ YES ☐ NO

[illegible]

If Yes, Rationale	
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From:

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 To:

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☐ YES ☒ NO

If Yes, Rationale	
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From:

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 To:

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If Yes, Rationale	
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From Grade To Credit/No Credit

Rationale	NOT APPLICABLE
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From

To	
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If Yes Rationale	
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Request for Graduate Course Change - Page 3

Change in COURSE CREDIT HOURS: ☒ YES ☐ NO If YES, fill in below:

NOTE: If credit hours increase/decrease, please provide documentation that specifies the adjusted work requirements.

From 1 credits

To 2 credits

Change in COURSE CONTENT: ☐ YES ☒ NO (May attach separate page if needed)

From This course has been under credited for the content that must be covered, therefore we wish to increase the credits for the course to 2 to allow more time to cover the content.

To No change in content just the number of hours allowed to present content.

Rationale The therapeutic exercise content is being moved to another course which is a more appropriate fit.

Request for Graduate Course Change-Page 4

College: COHP

Department: Physical Therapy

Course Number/Title PT 747 Pharmacology in Rehabilitation

1. REQUIRED COURSE: If this course is required by another department(s), identify it/them by name and attach the written notification you sent to them announcing to them the proposed change and any response received. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

2. COURSE DELETION: List any courses that will be deleted because of this change. A *Course Deletion* form is also required. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

3. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials as a result of this change, attach an estimate of the time and cost etc. required to secure these items. (NOTE: approval of this form does not imply approval for additional resources. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

Request for Graduate Course Change - Page 5

Please insert in the text box below your course change summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings) based on the appropriate change:

COURSE DESCRIPTION CHANGE

Department:

Course Number and Title:

Rationale:

Course Description (old)

Course Description: (new)

Catalog Description:

COURSE NUMBER CHANGE

Department:

Current Course Number/Title:

New Course Number:

Rationale:

Catalog Description:

Credit hours:

COURSE TITLE CHANGE

Department:

Current Course Number/Title:

New Course Title:

Rationale:

Catalog Description:

COURSE DESCRIPTION CHANGE

Department: School of Physical Therapy

Course Number and Title: PT 747 Pharmacology in Rehabilitation

Rationale: This course has been under credited for the content that must be covered, therefore we wish to increase the credits for the course to 2 to allow more time to cover the content.

Course Description (old): Examination of the effects of commonly used prescription, over the counter, and homeopathic drugs. Focus on methods of action, indications, contraindications, side effects and impact on physical therapy patients.

Course Description: (new): No change in Description

(old)

Course Title/Number	PT 747 Pharmacology in Rehabilitation
Semester/Year	Summer 2013
Days/Time	Tuesday (1-2:30) (10 wks)
Location	SOPT SMEC Room 113
Instructor	Dr. Sujoy Bose, PT, DPT, CCS
Office	SOPT Rm. 128
Phone	Dr. Bose: 304-696-5615
E-Mail	Boses@marshall.edu
Office/Hours	Tuesday/Thursday 10:30-12:00
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description: From Catalog

Credit Hours: 1

Examination of the effects of commonly used prescription, over the counter and homeopathic drugs. Focus on method of action, indications, contraindications, side effects and impact on physical therapy patients.

Course Student Learning Outcomes and Assessment Measures: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.

Course Student Learning Outcomes. Students will:	How Practiced in this Course	How Assessed in this Course
1. Describe how drugs are administered, absorbed, distributed, distribution, stored, metabolized and eliminated. (CC-1)	Lecture/discussion In-class case activity	Case Report Exam Questions
2. Identify general drug categories for therapeutic care of specific problems (CC-1. CC-2)		
3. Classify drugs as to their actions on different body organs. (CC-1)	Lecture/discussion In-class case activity	Case Report Exam Questions
4. Discuss how dysfunctions of various organs/systems can affect drugs administration, absorption, distribution and elimination, and how drug dosages are adjusted due to organ/systems dysfunction. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23)	Lecture/discussion In-class case activity	Case Report Exam Questions
5. Identify dangers of improper drug use, administration and metabolism. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC-5.31)	Lecture/discussion In-class case activity	Case Report Exam Questions

6. Evaluate potential therapeutic and adverse reactions of different drugs and between specific drugs and various physical therapy interventions. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC-5.31)	Lecture/discussion In-class case activity	Case Report Exam Questions
7. Identify problems for the practice of physical therapy arising from drug actions/interactions particularly in relationship to those between physical agents utilized in physical therapy practice and therapeutic drugs. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC5.31)	Lecture/discussion In-class case activity	Case Reports Exam questions
8. Plan specific strategies for applying physical therapy therapeutic interventions in patients taking medication for selected dysfunctions treated by physical therapists (i.e. musculoskeletal dysfunction, Parkinson's Disease, various cardiopulmonary dysfunctions and diabetic medications. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.26, CC-5.43, CC-5.44)	Lecture/discussion In-class case activity	Case Report Exam questions

Required Texts, Additional Reading, and Other Materials

1. Gladson B. *Pharmacology for Rehabilitation Professionals*, 2nd Edition. St. Louis, Missouri: Elsevier Saunders, 2011.
2. Ciccone CD. *Davis's Drug Guide for Rehabilitation Professionals*. Philadelphia: FA Davis, 2013.

Course Requirements / Due Dates: See Course Schedule Below for quiz/exam/assignment dates

1. Examinations (2)
2. In-class cases assignments: Answer assigned questions related to the case –due at the end of the class in which is it assigned.

Grading Policy

In Class Activities (10 points each)	50%	Grading Scale:	
Exam I (25 points)	25%	89.5% - 100.0%	A
Exam II (25 points)	25%	79.5% - 89.49%	B
Total	100%	70.0% - 79.49%	C
		Below 70.0%	F (non-passing)

Attendance Policy

[Please see the School of Physical Therapy Student Handbook for details].

Computer Requirements

Students must have access to Internet for research of evidence, and Blackboard to access course documents, notes, and other materials and for examination.

Course Outline/Schedule: The following topics will be covered.

Date	Session	Content	Required Readings Prior to Class
5/20	1	Principles of Pharmacology 1. Pharmacodynamics 2. Pharmacokinetics 3. Adverse Drug Reactions 4. Anti-infective and Anti-Cancer Agents 5. Antimicrobial Agents 6. Antiviral and Drugs for Fungal Infections 7. Cytotoxic Agents and Immune Modulation	Section 1. Ch 1-4 Sec 8 – Ch. 33, 34, 35 Sec. B – Ch. 36 Page#s announced to be announced on BB & Lecture material
5/22		Case 1	
5/27	2	Autonomic and Cardiovascular Pharmacology 1. Drugs acting on ANS 2. Antihypertensive Agents 3. Drug for Atherosclerosis 4. Drugs for CHF and Arrhythmias 5. Drugs for Pulmonary Disorders	Section 2 – See Powerpoint Lecture...
5/29		Case 2	
6/3	3	Neurologic Pharmacology 1. Drugs for Epilepsy and ADD/ADHD 2. Antispasticity Meds & Muscle Relaxants 3. Drugs for Degenerative Neurologic Disorders 4. Drugs for Depression and Anxiety 5. Drugs for Schizophrenia and Bipolar Illness	Section 5
6/5		Case 3	
6/10		Exam I on material in Sessions 1 & 2 only	Section 3 and 4
6/12	4	Pain Control 1. Anesthetic Agents 2. Drugs for Pain and Inflammation 3. Drugs for Arthritis-Related Conditions Endocrine Pharmacology 1. Selective Topics in Pharmacology Drugs for Osteoporosis and Diabetes	
6/17		Case 4	
6/19	5	Special Topics in Pharmacology 1. Drugs for Gastrointestinal Disorders 2. Vitamins and Minerals 3. Complementary/Alternative Medicine 4. Drugs of abuse Exploring Drug-Exercise Interactions	Section 7
6/24		Case 5	
6/26		Final exam on material in Session 3-5	



Marshall University
School of Physical Therapy
PT 747 Pharmacology in Rehabilitation
SYLLABUS

(New)

Course Title/Number	PT 747 Pharmacology in Rehabilitation
Semester/Year	Summer 2015
Days/Time	Wednesdays 3pm – 5:30pm
Location	SOPT SMEC Room 113
Instructor	Dr. Sujoy Bose, PT, DPT, CCS
Office	SOPT Rm. 128
Phone	Dr. Bose: 304-696-5615
E-Mail	bores@marshall.edu
Office/Hours	Open Door Policy; Or, By Appointment
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description: From Catalog

Credit Hours: 2

Examination of the effects of commonly used prescription, over the counter, and homeopathic drugs. Focus on methods of action, indications, contraindications, side effects and impact on physical therapy patients.

Course Student Learning Outcomes and Assessment Measures: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.

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1. Describe how drugs are administered, absorbed, distributed, distribution, stored, metabolized and eliminated. (CC-1)	Lecture/discussion In-class case activity	Case Report Exam Questions
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3. Classify drugs as to their actions on different body organs. (CC-1)	Lecture/discussion In-class case activity	Case Report Exam Questions
4. Discuss how dysfunctions of various organs/systems can affect drugs administration, absorption, distribution and elimination, and how drug dosages are adjusted due to organ/systems	Lecture/discussion In-class case activity	Case Report Exam Questions



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PT 747 Pharmacology in Rehabilitation
SYLLABUS

dysfunction. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23)		
5. Identify dangers of improper drug use, administration and metabolism. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC-5.31)	Lecture/discussion In-class case activity	Case Report Exam Questions
6. Evaluate potential therapeutic and adverse reactions of different drugs and between specific drugs and various physical therapy interventions. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC-5.31)	Lecture/discussion In-class case activity	Case Report Exam Questions
7. Identify problems for the practice of physical therapy arising from drug actions/interactions particularly in relationship to those between physical agents utilized in physical therapy practice and therapeutic drugs. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.27, CC-5.31)	Lecture/discussion In-class case activity	Case Reports Exam questions
8. Plan specific strategies for applying physical therapy therapeutic interventions in patients taking medication for selected dysfunctions treated by physical therapists (i.e. musculoskeletal dysfunction, Parkinson's Disease, various cardiopulmonary dysfunctions and diabetic medications. (CC-1, CC-2, CC-5.19, CC-5.22, CC-5.23, CC-5.26, CC-5.43, CC-5.44)	Lecture/discussion In-class case activity	Case Report Exam questions

Required Texts, Additional Reading, and Other Materials

1. Ciccone CD. *Davis's Drug Guide for Rehabilitation Professionals*. Philadelphia: FA Davis, 2013.

Suggested additional reading:

2. Costanzo, LS. *Physiology*, 4th or 5th Edition. Philadelphia, PA: Saunders-Elsevier

Course Format / Requirements / Due Dates:

LEARNING OPPORTUNITIES:

1. Classroom activities
 - a. Lectures
 - b. Group Discussions
 - c. Case study analyses
 - d. Student presentations
2. Audiovisual Aids



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- a. PowerPoint® Lecture Slides – These are not your official notes. You will need to make your own notes & supplement with your readings. This is vital.
3. **Examinations†** (Mid-term / Final): Final exam is comprehensive & covers entire subject matter.
4. Cases assignments: Answer assigned questions related to the case – Due end of week of assignment by Friday 8:00 pm
5. Five percent (5%) of the final grade in this class is subjectively based on professional behavior.
Professional behavior is construed to mean: Coming to class on time, respectful attention, respectful language use in communication, attending to the lecture and refraining from studying for other classes during class time, playing games on your computers/mobile devices, and going to online sites not related to the course, being prepared to have active intellectual exchange in the class on assignments or lecture, notifying the professor ahead of time of an absence, and helping others in the class to feel that the classroom is a productive learning environment.

†Exams:

The examination component of the class is performance-based. **ALL EXAMS ARE CUMULATIVE.** It may be on computer or on paper at instructor discretion. The exam reflects your understanding of the material & not how hard you worked on your preparation. Exams can be reviewed with instructor after grading is complete. If any question appears ambiguous, please e-mail instructor one day in advance of a scheduled meeting with specifics of the question. Grading decision of the instructor is final.

Grading Policy

GRADING POLICY & WEIGHTING	
Cases - Class Discussions (@10% each)	50%
Midterm exam †	20%
Final Exam †	25%
Participation, Attendance, Behavior, Respect, & Attitude	5%
Total	100%

Grading Scale	
89.5-100%	A
79.5-89.49%	B
69.5-79.49%	C
< 69.5%	F (non-passing)
*Rubric for Case Grading will be provided separately	

Remediation Policy:

Cases will be graded based upon criteria outlined for each assignment. If a student is unable to complete an assignment by the scheduled due date, he/she is responsible for notifying the course coordinator in advance of the date, or in the case of an emergency, as soon as possible.

Student Responsibility: If a student feels that he/she is not doing satisfactory work at mid-term, the student is responsible for making an appointment with the course instructor and/or advisor to design a plan for improvement.



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School of Physical Therapy
PT 747 Pharmacology in Rehabilitation
SYLLABUS

Attendance Policy

[Please see the School of Physical Therapy Student Handbook for details].

Computer Requirements

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School of Physical Therapy
PT 747 Pharmacology in Rehabilitation
SYLLABUS

Course Outline/Schedule: The following topics will be covered.

Date	Class #	Required Readings Prior to Class	Content	Text Chapter References	Assignments
5/20	1	Skeletal Muscle Physiology The physiology of Pain	Principles of Pharmacology <ul style="list-style-type: none"> Pharmacodynamics Pharmacokinetics Adverse Drug Reactions Introduction to Analgesics <ul style="list-style-type: none"> Skeletal Muscle Relaxants Anti-Inflammatory DMARDs & Anti-arthritis drugs Patient Controlled Analgesia Case Discussion	Section 1: Ch. 1-4 Section 3: Ch. 13 Section 4: Ch. 14-17	<i>Case 1 - Assigned</i>
5/27	2	Infectious conditions pathology Cancer Pathology	Case 1 Discussion Anti-infective Agents <ul style="list-style-type: none"> Antimicrobial Agents Antivirals Antifungals & Anti-parasitic Anti-Cancer Agents <ul style="list-style-type: none"> Cytotoxic Agents Immune Modulating Agents Case Discussion	Section 8: Ch. 33 Ch. 34 Ch. 35 Ch. 36-37	<i>Case 2 - Assigned</i>
6/3	3	Physiology of Autonomic Nervous & Cardiovascular System including Receptor types	Case 2 Discussion Autonomic Pharmacology <ul style="list-style-type: none"> Drugs acting on ANS Cardiovascular & Pulmonary Pharmacology <ul style="list-style-type: none"> Antihypertensive Agents Drugs for Atherosclerosis Drugs for CHF Drugs for Arrhythmias Case Discussion	Section 5: Ch. 18 - 20 Ch. 21-22	<i>Case 3 - Assigned</i>
6/10	4	Physiology of the Pulmonary System	Case 3- Discussion Pulmonary Pharmacology <ul style="list-style-type: none"> Respiratory Drugs Gastrointestinal Drugs <ul style="list-style-type: none"> Acid Blockers, PPI & Neutralizers 	Section 6: Ch. 26 - 27	<i>Case 4 - Assigned</i>



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			<ul style="list-style-type: none"> ▪ Antidiarrheals ▪ Laxatives ▪ Emetics & Anti-emetics ▪ Others 		
			Case Discussion		
6/17	5		Exam I	<i>Cumulative upto date</i>	
6/24	6	Endocrine Physiology including Different Hormones & their pathophysiology	Case 4 – Discussion Endocrine Pharmacology <ul style="list-style-type: none"> ▪ Drugs for Osteoporosis ▪ Pancreatic Hormones – Drugs for DM ▪ Adrenocorticoids ▪ Male & Female Hormones ▪ Thyroid & Parathyroid Drugs 	Section 7: Ch. 28 - 32	Case 5 - Assigned
			Case Discussion		
7/1	7		Case 5 – Discussion Neurologic Pharmacology <ul style="list-style-type: none"> ▪ Anesthetics – General / Local ▪ Drugs for Epilepsy and ADD/ADHD ▪ Drugs for Degenerative Neurologic Disorders Sedative-Hypnotics <ul style="list-style-type: none"> ▪ Drugs for Depression and Anxiety ▪ Drugs for Bipolar disorders Antipsychotic Drugs <ul style="list-style-type: none"> ▪ Schizophrenia 	Section 3: Ch. 11-12	
			Case Discussion		
7/8	8		Special Topics in Pharmacology <ul style="list-style-type: none"> ▪ Vitamins and Minerals ▪ Complementary/Alternative Medicine ▪ Drugs of abuse 	Section 8: Ch. 38 Appendix C (abused drugs)	
7/15	9		Make-Up / Catch-up Day... / Extra-tutoring session		
7/22	10		Final Exams	<i>Cumulative</i>	