2009-2010 Course Catalog

The University Of Montana

School of Physical Therapy and Rehabilitation Science

- Curriculum and Application Process
- Special Degree Requirements
- Courses
- Faculty

Reed Humphrey, Chair

The professional program in physical therapy grants the Doctor or Physical Therapy (D.P.T.) degree. The program has an entry-level D.P.T. program, an entry-level D.P.T./M.B.A. program, and a post-entry level transitional D.P.T. program. The following section describes the profession and the pre-professional requirements and application procedures. This information also is available on the program website at www.health.umt.edu/schools/pt.

The Profession

Physical Therapy is a health care profession concerned with the habilitation and rehabilitation of individuals having limitations resulting from pathological, surgical, or traumatic conditions. The profession is also concerned with prevention of disability in an effort to promote maximal use of an individual's capacities. Physical therapists are trained to evaluate neurological, musculoskeletal, cardiovascular, respiratory, and integumentary disorders. Exercise and physical agents, such as heat, cold, light, electricity, and massage are used to promote healing, relieve pain, maintain or restore strength, and improve joint range of motion and functional capabilities. Physical therapists play key roles in: 1) the physical therapy diagnosis and treatment of musculoskeletal injuries, 2) wellness and injury prevention, 3) rehabilitating injured workers to return to their jobs, 4) rehabilitating senior citizens after debilitating disease to enable them to remain independent, 5) helping handicapped children to live within the least restrictive environment, 6) preventing and treating sports related injuries, and 7) conducting research in the basic and clinical sciences. Knowledge of the psychological and social ramifications of disability affecting the individual and his or her family is an integral part of physical therapy intervention.

Physical therapy is practiced in diversified settings, including hospitals, clinics, skilled nursing facilities, sports medicine programs, public schools, and private practices. Legislation in Montana permits direct public access to physical therapists for evaluation and treatment without a physician referral. Even so, physical therapists remain committed to functioning as an integral member of the health care team.

The physical therapy educational program at The University of Montana seeks to prepare physical therapists who have a broad base of skills upon graduation, and who will be able to implement physical therapy services in many settings, especially

rural environments. Rural settings require a physical therapist to serve not only as a provider of direct patient care, but to fulfill the roles of administrator, supervisor, teacher, consultant, and researcher. Students successfully completing the professional program meet the competencies for physical therapy as determined by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, a Doctor of Physical Therapy degree, and are prepared for state licensure.

The Physical Therapy Program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association through 2018.

High School Preparation:

Specific high school courses are not required but a background is recommended in mathematics, chemistry, biology, physics, English, and other communication skills.

Pre-Professional Physical Therapy Curriculum and Application Process

Students wishing to apply to the professional physical therapy program at The University of Montana-Missoula may select any major for their undergraduate degree. While pre-physical therapy is not a degree granting major at the University, prospective applicants should list pre- professional physical therapy (PPPT) as their second major. This will allow them also to receive advising from the School of Physical Therapy and Rehabilitation Science in order to assure adequate preparation for the professional program. In addition to completing a baccalaureate degree, applicants must take the following prerequisite courses and meet the additional application requirements listed. All prerequisite courses must be taken for a traditional letter grade and must be completed with a grade of "C" (2.00) or better.

Prerequisite Courses and Credits

Human Anatomy and Physiology: minimum of two semesters or two to three quarters of human anatomy and physiology. This course work must be completed in a Biology, Anatomy and/or Physiology department. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution. A comparative vertebrate anatomy and an animal physiology course may be substituted for human anatomy and physiology.

Chemistry: minimum of two semesters or three quarters of chemistry with laboratory. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution.

Physics: minimum of two semesters or three quarters of physics with laboratory. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution.

Statistics: minimum of one semester or quarter of statistics course work.

Exercise Physiology: minimum of one semester or quarter of exercise physiology with laboratory. Online lecture-only courses do not meet this requirement.

Social Sciences: minimum of two semesters or three quarters of social/behavioral science classes. These classes may include courses offered by Psychology, Educational Psychology, Sociology, Social Work, Cultural Geography and Anthropology departments.

Certification in adult, child, and infant CPR is assumed.

Computer literacy is assumed. You should be able to utilize email communication, word processing, statistical and spreadsheet programs and be able to complete searches on the Web.

Suggested Prerequisite Courses at The University of Montana-Missoula

BIOL 312, 313 Anatomy and Physiology 8 I, II or SCN 201, 202 CHMY 121N, 123N, 124N (CHEM 8 151N, 152N, 154N) Intro to General Chemistry, Intro to Organic & Biochem and Laboratory PHYS 111N and 113N, 112N and 114N 10 Fundamental Physics I, II HHP 377-378 Exercise Physiology 4 with laboratory (Exempt from HHP 226 prerequisite) PSYX 100S (PSYC 100S) Introduction 7 to Psychology or SOCI 101S (SOC 110) Introduction to Sociology or ANTH 101H Introduction to Anthropology or PSYX 340S (PSYC 330S) Abnormal Psychology or PSYX 230S (PSYC 240S) Developmental Psychology STAT 216 (MATH 241) Introduction to Statistics or PSYX 222 (PSYC 240S) Psychological Statistics or SOCI 202 **Social Statistics** HHP 288, 289 Advanced First Aid/CPR. Computer literacy required.

Additional Requirements for Application

Because the professional program is sequential, students must enter the program in the autumn semester of the first professional year.

Online application and information about admissions policies for the professional program are available from the School of Physical Therapy and Rehabilitation Science website www.health.umt.edu/schools/pt. Application fees are required with one going to PTCAS and another going to the School of Physical Therapy and Rehabilitation Science. Questions about admission should be addressed to physical.therapy@umontana.edu.

The application documentation must be submitted online by December 15 (PTCAS application and School Supplemental application) and the supporting documents must be forwarded directly to the Chair, Student Selection Committee, School of Physical Therapy and Rehabilitation Science, arriving no later than December 15, preceding the autumn semester of the year for which admission is requested. The Graduate Record Exam (GRE) must be completed by November 15 and the scores sent to The University of Montana. (Institution code 4489, Department code 0619)

To be considered for admission, an applicant must have obtained a cumulative grade average of at least 2.75 (on a four-point scale) in all college courses for which the applicant has registered, as well as a minimum of 3.00 in the required pre-requisite course work. Some preference will be given to Montana residents. To qualify as a resident applicant, the student must be a Montana resident on the closing date for submission of the application for admission.

In addition to these requirements, applicants must demonstrate an appreciation and knowledge of the practical duties and responsibilities of the physical therapist through direct exposure in a variety of clinical settings (a minimum of 80 hours of work or observation under the direct supervision of a physical therapist before application). At least 3 different clinical settings must be included in the 80 hours of observation - outpatient, inpatient acute care, rehab/sub-acute rehab, skilled nursing/extended care, school/pediatrics, or home health. These observation hours must be completed before application submission. Applicants are expected to participate in activities beyond their academic pursuits, such activities should include employment, volunteer activities (school, sport, community, or church) and employment/volunteer activities interacting with people with disabilities.

Application documentation includes three letters of recommendation, one of which must be from a licensed physical therapist. These letters will be submitted electronically through the PTCAS application.

After completed applications have been received, the Selection Committee will screen the applications based on grade average in pre-requisite courses, overall grade average, GRE scores, stated purpose, evidence of leadership, honors, community service, and letters of recommendation. Based upon the results of this screening, only those applicants who appear best qualified will be invited for a personal interview. Although an invitation to appear for interview does not assure the applicant a place in the class, the final selection will be made from those interviewed. All applicants will be notified in writing of their status.

Professional Physical Therapy Program

The professional entry-level D.P.T. program is 33 months in length. Enrollment is limited to 34 students in each class. All students pay first level graduate tuition and fees plus a tuition surcharge each Autumn and Spring Semesters. The students will also pay first level tuition and fees for two summer sessions.

Joint MBA/DPT Program

Students who wish to participate in this joint dual degree program must satisfy the normal admission requirements for both The School of Physical Therapy and Rehabilitation Science's entry -level DPT program and The School of Business

Administration's MBA program. Students cannot enter the joint program until they have been accepted separately by both schools. If accepted by both programs, permission to participate in the joint program must be obtained from both the Chair of the DPT program and the Director of the MBA program. Students completing this dual degree program will receive two separate degrees, the DPT and the MBA. Requirements consist of competing 32 credits for the MBA including 8 transferred in from the School of Physical Therapy and Rehabilitation Science and 118 total credits for the DPT including 8 transferred from the School of Business Administration. Students will work with faculty advisors from both programs to determine an appropriate curricular schedule.

Special Degree Requirements

Once admitted into the professional entry-level Physical Therapy Program, all students must achieve a C grade or higher (or a CR, in credit/no credit) in all required courses in the physical therapy curriculum. Because courses in the curriculum are sequential. a student who fails to achieve a C grade (or a CR, in credit/noncredit courses) in any course may not be allowed to continue in the next semester of the professional program. The student must retake the course at the next offering. Students must maintain a minimum 2.50 grade average while in the professional entry-level D.P.T. program. Students who do not maintain this average will be on academic probation and must achieve the 2.50 grade average in order to graduate. Students who fail to progress in the expected manner for two consecutive years will be dismissed from the Physical Therapy Program subject to review by the Academic Requirements Committee and the Dean of the College of Health Professions and Biomedical Sciences. Students also must comply with all School academic and professional conduct policies as outlined in the Physical Therapy Program Student Handbook. All students enrolled in the program are expected to maintain a full-time academic course load (minimum of 12 semester credits) during each semester of the program.

Professional Physical Therapy Curriculum

First Professional Year		Α		S
PT 503 Physical Therapy	4		-	
and Health Care System				
PT 510 Applied Clinical	5		-	
Anatomy and Kinesiology				
PT 516 Musculoskeletal	6		-	
Evaluation I				
PT 519 Musculoskeletal	-		6	
Evaluation II				
PT 520 Development	-		3	
Through the Life Span				
PT 526 Physical Therapy	4		-	
Interventions I				
PT 527	-		2	
Electrophysiological				
Testing				
•				

DT 500 DL sissLTL see		4
PT 528 Physical Therapy Interventions II	-	4
PT 529 Biomechanics and	12	-
Exercise Interventions		
PT 536 Neurosciences for	-	5
the Health Professions		
PT 560 Introduction to	-	1
Research		
PT 582 Clinical	-	1
Experience I	24	22
Total Summer Sessi	21	Cradita
		Credits
PT 587 Clinical Internship		0
Second Professional Year		S
	2	-
and Pharmacology PT 561 Research in	2	
Physical Therapy	2	-
PT 562 Scholarly Project I	1	_
PT 563 Cardiopulmonary		_
Physical Therapy	5	
PT 565 Physical Therapy	2	-
for Children	_	
PT 566 Advanced	(1)	(1)
Anatomy Laboratory	•	. ,
PT 567	3	-
Neurorehabilitation I		
PT 568	-	2
Neurorehabilitation II		
PT 569 Orthopedic	3	-
Physical Therapy I		•
PT 572 Practice and Administration	-	2
		2
PT 573 Orthopedic Physical Therapy II	-	2
PT 575 Physical Therapy	_	4
Interventions III		7
PT 576 Synthesis of	-	1
Clinical Evaluation and		
Intervention		
PT 578 Physical Therapy	-	4
Interventions IV		
PT 588 Clinical Internship	-	4
II		
PT 671 Scholarly Project	-	1
II		

Total	16-17		19-20	
Summer Sessi	on		Credits	
PT 589 Clinical Internship	Ш	5		
Third Professional Year		Α		S
PT 626 Primary Care in Physical Therapy	3		-	
PT 627 Prevention, Wellness, and Education	2		-	
PT 672 Research in Physical Therapy II	2		-	
PT 570 Psychology of Illness and Disability	2		-	
PT 676 Clinical Mastery in Physical Therapy	4		-	
PT 679 Trends in Clinical Practice (may be repeated)	4		-	
PT 690 Clinical Internship	-		12	
Total	17		12	

Seven credits of professional elective course work are required for the D.P.T. These may be satisfied by PT 671, 672, 679 sections or courses outside the school. Only 6 credits may be independent study.

Total credits required for graduation: 118

Transitional D.P.T. Curriculum

The mission of the transitional Doctor of Physical Therapy (tDPT) curriculum is to provide an affordable, practical, and career-enhancing plan of study that allows licensed physical therapists to transition their current entry-level professional degree to the Doctor of Physical Therapy degree. The program of study offers licensed physical therapists with an academic degree in Physical Therapy the opportunity to earn the Doctor of Physical Therapy (DPT) degree. The focus of the program is to bridge the gap between current DPT and prior degree entry-level expectations. The program is delivered in a distance-education format, although students are required to attend a weekend during the course of study for a two-day seminar in concepts of professionalism in an autonomous profession and other requirements as identified in the program of study.

Admission Requirements

Applicants must:

• Provide evidence of being currently licensed to practice physical therapy in a state or jurisdiction of the United States; and

- Complete a graduate admission application supplied by the School of Physical Therapy and Rehabilitation Science at The University of Montana, including official transcripts from the institution awarding the entry-level physical therapy degree.
- Scores from the Graduate Record Examination (GRE). Candidates without available GRE scores may also satisfy admission requirements by supplying evidence meeting the following criteria:
- The applicant has a graduate degree in the field from an accredited institution, along with at least one other qualification from (a), (b), or (c) below. OR
- The applicant has a GPA from an accredited undergraduate institution sufficient for success in the graduate program along with at least two other qualifications from (a), (b), or (c) below.
- (a) Extensive, high-level, and relevant experience in the field of physical therapy as documented in the tDPT application. (b) Record of high quality scholarly contributions such as publications in peer-reviewed journals or presentations at relevant professional meetings. (c) Demonstration of ability to function with excellence in the discipline through submission of a writing sample (as requested in the tDPT application).
- Agree to the program of study in the School of Physical Therapy and Rehabilitation Science prior to matriculation. The admissions committee will review the application and transcript(s) to ensure compliance with entry-level accreditation requirements for the DPT degree. Credits earned in the tDPT curriculum in combination with those previously earned in the professional phase of entry-level preparation and other relevant coursework must be commensurate with the requirements for completion of the entry-level DPT degree awarded at The University of Montana.

Individuals with a master's degree can complete the tDPT curriculum in five consecutive semesters; bachelor's degree participants require an additional five courses, adding two semesters (seven total semesters).

Minimum Grade and Academic Progression Requirements

Students must receive a minimum grade of C in all tDPT courses. Students who receive a grade of C- or lower must repeat the course to achieve a grade of B or better to pass the course. Repetition of courses will result in additional tuition charges. Students must achieve a grade point average of 3.0 or greater in the prescribed program of study to graduate from the tDPT curriculum. Only the grades within the tDPT curriculum will be included in the calculation of the GPA. Failure to maintain a 3.0 GPA for two semesters will result in dismissal from the tDPT curriculum.

Degree Requirements

For candidates holding an entry-level master's degree, successful completion of a 20 credit core curriculum that includes:

Semester One

PT 652 Pharmacology in Rehabilitation (2 cr.) PT 654 Clinical Decision Making: Guide to PT Practice (1cr)

Semester Two

PT 653 Legal and Ethical Issues for PTs (1 cr.) PT 655 Business and Marketing (2 cr.)

Semester Three

PT 656 Coding and Reimbursement (1 cr.) PT 651 Medical Imaging and Rehabilitation (2 cr.) PT 657 Professionalism: The Doctoring Profession (2 cr.)

Semester Four

PT 650 Screening for Medical Disorders (2 cr.) PT 658 Critical Assessment and Application of Best Evidence (3 cr.)

Semester Five

PT 659 Capstone Project (4 cr.)

For bachelor's candidates, semesters 1-4 are the same as above; semester 5-7 are as follows:

Semester Five

PT 660 Management of Patients with Musculoskeletal Disorders (2 cr.) PT 661 Management of Patients with Cardiovascular and Pulmonary Disorders (2 cr.)

Semester Six

PT 662 Management of Patients with Neurological Disorders (2 cr.) PT 663 PT Management of Patients with Integumentary Disorders (2 cr.)

Semester Seven

PT 664 Wellness and Health Promotion (2 cr.) PT 659 Capstone Project (4 cr.)

Candidates unable to complete PT 659 by the course completion date will receive an incomplete grade. The incomplete must be resolved within one month of receipt; otherwise a failing grade will be issued and the course must be repeated with an additional tuition charge.

Courses

U = for undergraduate credit only, UG = for undergraduate or graduate credit, G= for graduate credit. R after the credit indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree.

Physical Therapy (P T)

U 496 Independent Study Variable cr. (R-12) Offered intermittently. UG 497 Research 1-10 cr. (R-10) Offered autumn and spring. Prereq., consent of instr.

UG 497 Research 1-10 cr. (R-10) Offered autumn and spring. Prereq., consent of instr.

- G 503 Physical Therapy and the Health Care System 4 cr. Offered autumn. An introduction to physical therapy and its relationship to the health care system. Topics include introduction to the PT literature, medical terminology, medical records, communication, ethics, and professional issues in physical therapy.
- G 510 Applied Clinical Anatomy and Kinesiology 5 cr. Offered autumn. Prereq., course in human anatomy and consent of instr. Anatomy of the neuromusculoskeletal system and body cavities in relation to movement, function and clinical correlates.
- G 516 Musculoskeletal Evaluation I 6 cr. Offered autumn. Coreq., PT 510, 529. Principles of physical therapy examination and evaluation including pathology, imaging, patient interviews, tests and measures.
- G 519 Musculoskeletal Evaluation II 6 cr. Offered spring. Prereq., PT 510, 516. Continuation of PT 516. Physical therapy examination and evaluation including pathology, imaging, patient interviews, tests and measures.
- G 520 Development Through the Life Span 3 cr. Offered spring. Prereq., PT 510, 511. Process-based learning course covering human development with emphasis on motor development including pediatrics and geriatrics and a review of geriatric care programs.
- G 525 Clinical Medicine and Pharmacology 2 cr. Offered autumn. Pathology, evaluation, differential diagnosis, pharmacology, management of oncological, endocrine, metabolic, GI, renal, and immunological pathology.
- G 526 Physical Therapy Interventions I 4 cr. Offered autumn. Coreq., PT 516, 529. Basic skills of transfers, bedmobility, gait assistive device use, soft tissue mobilization, and application of physical agents.
- G 527 Electrophysiological Testing and Therapeutics 2 cr. Offered spring. Physiology, indications, contraindications, and application of physical agents. Theory and application of electrodiagnosis and electrotherapy procedures.
- G 528 Physical Therapy Interventions II 4 cr. Offered spring. Prereq., PT 526, 529. Coreq., PT 519. Continuation of PT 526. Basic principles of PNF. Application and prescription of therapeutic exercise to various patient problems and environments, including gait functional training, and aquatics. Emphasis on equipment analysis and patient education.
- G 529 Biomechanics and Exercise Interventions 2 cr. Offered autumn. Coreq., PT 516, 526. Principles of upper extremity biomechanics, exercise prescription, and exercise and other therapeutic interventions for the upper extremity and cervical spine.
- G 536 Neurosciences for the Health Professions 5 cr. Offered spring. Anatomy of the head and neck, and neuroanatomy of the human nervous system with emphasis on evaluation of central nervous system lesions and pathological conditions, clinical applications to physical therapy.
- G 560 Introduction to Research 1 cr. Offered spring. Introduction to the research process in physical therapy including evidence based practice, faculty research tracks, and laboratories. Includes beginning literature review for special/research project.
- G 561 Research Methods in Physical Therapy 2 cr. Offered autumn. Prereq., STAT 216 (MATH 241). Research design and statistical analyses in physical therapy and related sciences.
- G 562 Scholarly Project I 1 cr. Offered autumn. Directed research with individual faculty advisor to develop proposal for research/special project.

G 563 Cardiopulmonary Physical Therapy 3 cr. Offered autumn. Prereq., PT 528, PT529. Cardiovascular and pulmonary pathology, pharmacology, and differential diagnosis. Physical therapy assessment and interventions for patient's with cardiovascular and/or pulmonary disease.

G 565 Physical Therapy for Children 2 cr. Offered autumn. Prereq., PT 520, PT 536. Evaluation and intervention of neuromotor and musculoskeletal physical therapy rehabilitation of children. Physical therapy for children in school systems.

G 566 Advanced Anatomy Laboratory 1 cr. Offered autumn and spring. Prereq., PT 510, 511. Regional dissection and study of the back, neck, upper extremity and lower extremity, including clinical correlates.

G 567 Neurorehabilitation I 3 cr. Offered autumn. Prereq., PT 536. Neurologic physical therapy assessment and intervention of adults with cerebrovascular accidents, Parkinson disease, or multiple sclerosis. Motor control and motor learning and application to physical therapy neurorehabilitation. Includes wheelchair and home assessment.

G 568 Neurorehabilitation II 2 cr. Offered spring. Prereq., PT 536. Neurologic physical therapy assessment and intervention of adults with traumatic brain injury or spinal cord injury.

G 569 Orthopedic Physical Therapy I 3 cr. Offered autumn. Prereq., PT 510, 516, 519, 528, 529. Patient/client management of orthopedic condition of the extremities.

G 570 Psychology of Illness and Disability 2 cr. Offered autumn. Psychological response to illness and disability to include patient motivation, patient/professional interaction, and treatment of persons with chronic pain.

G 572 Practice and Administration 2 cr. Offered spring. Organization and management of the physical therapy department with emphasis on the therapist's role as administrator, supervisor and consultant.

G 573 Orthopedic Physical Therapy II 2 cr. Offered spring. Prereq., PT 516, 519, 569. Patient/Client management of orthopedic conditions of the spine.

G 575 Physical Therapy Interventions III 4 cr. Offered spring. Prereq., PT 528, PT 529. Coreq., PT 578. Includes units in burns and wound care, prosthetics, plus the American Disabilities Act and the management of chronic disability.

G 576 Synthesis of Clinical Evaluation and Intervention 1 cr. Offered spring. Synthesis and analysis of PT evaluation and intervention through case reports.

G 577 Applied Clinical Teaching in Physical Therapy 1-2 cr. Offered autumn. Teaching experience in practical application of clinical therapy.

G 578 Physical Therapy Interventions IV 4 cr. Offered spring. Prereq., PT 528, PT 529. Coreq., PT 575. Physical therapy assessment and interventions are addressed in the areas of occupational health, pelvic floor dysfunction, obstetric client care, advanced orthotics and activities of daily living.

G 582 Clinical Experience I 1 cr. Offered spring. Clinical experience in physical therapy departments.

G 587 Clinical Internship I 4 cr. Offered summer. Prereq., PT 582. Seven weeks of full-time clinical experience with emphasis on developing patient treatment skills.

G 588 Clinical Internship II 4 cr. Offered spring. Prereq., PT 587. Five weeks of full-time clinical experience with emphasis on patient evaluation and continuation of developing patient treatment skills.

G 589 Clinical Internship III 5 cr. Offered summer. Prereq., PT 588. Eight weeks of full-time clinical experience with emphasis on learning about administrative issues, problem-solving, time management, and communication skills. Continuation of development of patient treatment and evaluation skills.

G 594 Seminar Variable cr. (R-6) Offered autumn and spring.

G 595 Special Topics Variable cr. (R-4) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

G 596 Independent Study Variable cr. (R-6) Offered autumn and spring.

G 597 Research 1-10 cr. (R-10) Offered autumn and spring. Prereq., consent of instr.

G 626 Primary Care 3 cr. Offered autumn. Differential diagnosis of system pathology including basic verbal and physical screening, laboratory tests and pharmacological intervention. Clinical medicine of infectious diseases, hematology, gastrointestinal and urogenital systems.

G 627 Prevention, Wellness, and Education 2 cr. Offered autumn. Nutrition, health promotion, patient and support network education, exercise/fitness, disease and injury prevention, life span emphasis.

G 650 Screening for Medical Disorders 2 cr. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding appropriate referral of a patient to a physician for evaluation of medical conditions outside the scope of physical therapy.

G 651 Medical Imaging and Rehabilitation 2 cr. Offered autumn, summer. Prereq. Enrolled in t-DPT curriculum. Provide the physical therapy clinical learner with the tools needed to interpret and apply specialized medical imaging information to the rehabilitation patient.

G 652 Pharmacology in Rehabilitation 2 cr. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Provide clinical learners with the primary drug classes and the physiologic basis of their action.

G 653 Legal and Ethical Issues for Physical Therapists: Considerations in Risk Management 1 cr. Offered spring, summer. Prereq. Enrolled in t-DPT curriculum. Foundational information as to the legal, ethical and administrative decision making process often facing physical therapists in clinical practice.

G 654 Clinical Decision Making: Guide to Physical Therapist Practice 1 cr. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Provide ways to utilize the Guide to PT Practice for effective and efficient clinical decision making.

G 655 Business and Marketing 2 cr. Offered spring, summer. Prereq. Enrolled in t-DPT curriculum. Enhance the PT clinical learner's appreciation of business and management practices needed to succeed within the current healthcare landscape.

G 656 Coding and Reimbursement 1 cr. Offered autumn, summer. Prereq. Enrolled in t-DPT curriculum. Educate the clinical learner in analyzing reimbursement of current billing, accounts receivable, collection procedures and use of proper coding.

- G 657 Professionalism: The Doctoring Profession 2 cr. Offered summer. Prereq. Enrolled in t-DPT curriculum. This seminar course provides the clinical learner with the opportunity to analyze and discuss the roles/responsibilities and challenges/opportunities inherent in doctoral level physical therapy practice.
- G 658 Critical Assessment and Application of Best Evidence 3 cr. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Develop skills in the application of evidence-based practice as a model for effective clinical decision-making.
- G 659 Capstone Project 4 cr. Offered spring, summer. Prereq. Enrolled in t-DPT curriculum. Development of the skills needed by physical therapists to fulfill their role as effective participants in the research process. Guide student through the capstone case report completion process.
- G 660 Management of Patients with Musculoskeletal Disorders 2 cr. Offered autumn, spring, summer. Prereq., enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with musculoskeletal disorders.
- G 661 Management of Patients with Cardiovascular and Pulmonary Disorders 2 cr. Offered autumn, spring and summer. prereq., Enrolled in t-DPT curriculum. PT's role, responsibilities and decision-making processes regarding appropriate patient management of persons with cardiovascular and/or pulmonary disorders.
- G 662 Management of Patients with Neurological Disorders 2 cr. Offered autumn, spring, summer. Prereq., enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with neurological disorders.
- G 663 Management of Patients with Integumentary Disorders 2 cr. Offered autumn, spring, summer. Prereq., Enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with integumentary disorders.
- G 664 Wellness and Health Promotion 2 cr. Offered autumn, spring, summer. Prereq., Enrolled in t-DPT curriculum. PT role, responsibilities, and decision-making processes regarding patient/client involvement with wellness and health promotion.
- G 671 Research in Physical Therapy I 1 cr. Offered spring. Prereq., D.P.T. student. Data collection for research/special project.
- G 672 Research in Physical Therapy II 2 cr. Offered autumn. Data analysis, writing of research manuscript, presentation of project.
- G 673 Advanced Practice and Administration II 2 cr. Offered spring. Topics build on content presented in PT 503 and 572. Emphasis on identifying key niches in health care and development of a business plan.
- G 676 Clinical Mastery in Physical Therapy 4 cr. Offered autumn. Learner-centered course synthesizing PT examination, evaluation, diagnosis, prognosis, intervention, outcomes, reimbursement, education, delegation, and wellness.
- G 679 Trends in Clinical Practice 1-2 cr. (R-4) Offered autumn. Focus on advanced clinical topics in physical therapy.
- G 690 Clinical Internship IV 12 cr. Prereq., PT 589. Custom-designed clinical internship of 15 weeks. Includes writing and presentation of case study or special project.
- G 696 Independent Study 1-4 cr. (R-4) Offered intermittently.
- G 697 Research 1-10 cr. (R-10) Offered autumn and spring. Prereq., consent of instr.

Faculty

Professors

- Reed Humphrey, Ph.D., University of Pittsburgh, 1986; P.T., Virginia Commonwealth University, 1994 (Chair)
- Charles Leonard, Ph.D., Medical College of Pennsylvania, 1985; P.T., Duke University, 1978

Associate Professors

- Beth Ikeda, M.S., D.P.T., Massachusetts General Hospital Institute of Health Professions, 1989, 2004, P.T., Mayo School of Health Related Science, 1981
- James J. Laskin, Ph.D., University of Alberta, 2001; P.T., University of Saskatchewan, 1987

Assistant Professors

- Steven Fehrer, Ph.D., University of Minnesota, 1984; P.T., Arcadia University, 1995
- David L. Levison, M.H.S., Indianapolis Krannert School of Physical Therapy, 1996;
 P.T., University of Montana, 1986
- Kimberly J. Mize-Humphrey, D.P.T., Rocky Mountain University of Health Professions, 2006., P.T., University of Wisconsin-LaCrosse, 1996
- Ryan Mizner, Ph.D., University of Delaware, 2005; P.T., University of Delaware, 2000
- Sara Scholtes, Ph.D., Washington University, 2009; P.T., Washington University, 2004

Nora Staael Evert Physical Therapy & Rehabilitation Clinics

UM Sports & Orthopedic Clinic

- Brenda Mahlum, D.P.T., Rocky Mountain University of Health Professions, 2006; P.T., University of North Carolina, 1984
- Mary Coar, B.S., P.T., The University of Montana, 1993

New Directions Wellness Center

- Susan Ostertag, D.P.T., Arizona School of Health Sciences, 2007, B.S., P.T., University of Montana, 1993
- Jessica Malouf, D.P.T., University of Montana, 2008
- Molly Blair, B.S., University of Montana, 2002