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RECORD OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Division of
PHYSICAL THERAPY

DEPARTMENT OF MEDICAL ALLIED
HEALTH PROFESSIONS

A THE SCHOOL
OF MEDICINE



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NORTH CAROLINA AT CHAPEL HILL**

DIVISION OF PHYSICAL THERAPY
DEPARTMENT OF MEDICAL ALLIED HEALTH PROFESSIONS
SCHOOL OF MEDICINE

1976-1978

THE UNIVERSITY OF NORTH CAROLINA

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The University of North Carolina was chartered in 1789 and opened its doors to students at its Chapel Hill campus in 1795. Throughout most of its history, it has been governed by a Board of Trustees chosen by the Legislature and presided over by the Governor. During the period 1917-1972, the Board consisted of one hundred elected members and a varying number of **ex-officio** members.

By act of the General Assembly of 1931, without change of name, it was merged with The North Carolina College for Women at Greensboro and The North Carolina State College of Agriculture and Engineering at Raleigh to form a multicampus institution designated The University of North Carolina.

In 1963 the General Assembly changed the name of the campus at Chapel Hill to The University of North Carolina at Chapel Hill and that at Greensboro to The University of North Carolina at Greensboro and, in 1965, the name of the campus at Raleigh was changed to North Carolina State University at Raleigh.

Charlotte College was added as The University of North Carolina at Charlotte in 1965, and, in 1969, Asheville-Biltmore College and Wilmington College

became The University of North Carolina at Asheville and The University of North Carolina at Wilmington, respectively.

A revision of the North Carolina State Constitution adopted in November 1970 included the following: "The General Assembly shall maintain a public system of higher education, comprising The University of North Carolina and such other institutions of higher education as the General Assembly may deem wise. The General Assembly shall provide for the selection of trustees of The University of North Carolina. . . ." In slightly different language, this provision had been in the Constitution since 1868.

On October 30, 1971, the General Assembly in special session merged, without changing their names, the remaining ten state-supported senior institutions into the University as follows: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. This merger, which resulted in a statewide multicampus university of sixteen constituent institutions, became effective on July 1, 1972.

The constitutionally authorized Board of Trustees was designated the Board of Governors, and the number was reduced to thirty-two members elected by the General Assembly, with authority to choose their own chairman and other officers. The Board is "responsible for the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." Each constituent institution, however, has its own board of trustees of thirteen members, eight of whom are appointed by the Board of Governors, four by the Governor, and one of whom, the elected president of the student body, serves *ex officio*. The principal powers of each institutional board are exercised under a delegation from the Board of Governors.

Each institution has its own faculty and student body, and each is headed by a chancellor as its chief administrative officer. Unified general policy and appropriate allocation of function are effected by the Board of Governors and by the President with the assistance of other administrative officers of the University. The General Administration office is located in Chapel Hill.

The chancellors of the constituent institutions are responsible to the President as the chief administrative and executive officer of The University of North Carolina.

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WADSWORTH DUANE ROY III, Wake County Memorial Hospital, Raleigh, North Carolina

LINDA SMITH, Hillhaven Convalescent Center, Raleigh, North Carolina

WILLIAM R. STOKELY, Physical Therapy Clinic, High Point, North Carolina

AFFILIATING AGENCIES AND HOSPITALS COOPERATING IN CLINICAL EDUCATION PROGRAM*

Alamance County Health Department, Burlington, North Carolina

Appalachian District Health Department, Boone, North Carolina

Caswell Training Center, Kinston, North Carolina

Center for Human Development, Charlotte, North Carolina

Children's Center for the Physically Handicapped, Winston-Salem, North Carolina

Charlotte Memorial Hospital, Charlotte, North Carolina

Charlotte Rehabilitation Hospital, Charlotte, North Carolina

Coastal Center, Ladson, South Carolina

C. J. Harris Community Hospital, Sylva, North Carolina

Developmental Evaluation Clinic, Durham, North Carolina

District Health Department, Chapel Hill, North Carolina

Division for Disorders of Development and Learning, Chapel Hill, North Carolina

Division of Health Services, Department of Human Resources, Raleigh, North Carolina;

Eastern Regional Office, Greenville, North Carolina;

South Central Regional Office, Fayetteville, North Carolina;

North Central Regional Office, Winston-Salem, North Carolina;

Western Regional Office, Black Mountain, North Carolina

Dorothea Dix Hospital, Raleigh, North Carolina

Durham County Health Department, Durham, North Carolina

Durham Rehabilitation Center, Durham, North Carolina

Gaston Memorial Hospital, Gastonia, North Carolina

Forsyth Memorial Hospital, Winston-Salem, North Carolina

Georgia Warm Springs Hospital, Warm Springs, Georgia

Greensboro Cerebral Palsy and Orthopedic School, Greensboro, North Carolina

Greenville Hospital System, Greenville, South Carolina

Hand Rehabilitation Center, Chapel Hill, North Carolina

*These facilities may vary from year to year depending upon the needs of individual students, number of students and stability of supervising staff.

Haywood County Hospital, Waynesville, North Carolina
Hillhaven Convalescent Center, Durham, North Carolina
Hillhaven Convalescent Center, Raleigh, North Carolina
Hillhaven Rose Manor Convalescent Center, Durham, North Carolina
John Umstead Hospital, Butner, North Carolina
Kendall Center, Greensboro, North Carolina
Lenox Baker Cerebral Palsy and Crippled Children's Hospital of North Carolina,
Durham, North Carolina
Lincoln Community Health Center, Durham, North Carolina
Memorial Mission Hospital, Asheville, North Carolina
Murdoch Center, Butner, North Carolina
North Carolina Baptist Hospital, Winston-Salem, North Carolina
North Carolina Memorial Hospital, Chapel Hill, North Carolina
North Carolina Orthopedic Hospital, Gastonia, North Carolina
Orthopedic Hospital and Rehabilitation Center, Asheville, North Carolina
Paul Proud (Private Practice), Durham, North Carolina
Physical Therapy Clinic, High Point, North Carolina
Presbyterian Hospital, Charlotte, North Carolina
Raleigh Orthopedic Clinic, Raleigh, North Carolina
Randolph Hospital, Inc., Asheboro, North Carolina
Rehabilitation and Cerebral Palsy Center of Wake County, Raleigh, North Carolina
Rehabilitation Associates, Inc., Asheville, North Carolina
Rex Hospital, Raleigh, North Carolina
Richmond Memorial Hospital, Richmond, Virginia
Rosewood Center, Owings Mills, Maryland
Sports Medicine, Chapel Hill, North Carolina
Veterans Administration Hospital, Salisbury, North Carolina
Wake County Memorial Hospital, Raleigh, North Carolina
Watts Hospital, Durham, North Carolina
Western Carolina Center for Mentally Retarded Children, Morganton, North Carolina

GENERAL INFORMATION

HISTORICAL BACKGROUND

In 1957, the School of Medicine, in conjunction with the General College of The University of North Carolina at Chapel Hill, accepted the responsibility to provide for the education of physical therapists. Official recognition of physical therapy as an undergraduate four-year curriculum reflects the constant interest and effort of the University to improve health services in the state and in the nation by providing an opportunity for needed personnel to receive the necessary education.

The University of North Carolina at Chapel Hill, having been provided for in the state constitution in 1776, is the oldest state university in the United States. In 1879, the School of Medicine was established with offerings under the preceptorial system. The School of Medicine has been a member of the Association of American Medical Colleges since 1908 and has full approval of the Council on Medical Education of the American Medical Association. With the graduation of the class of 1954, the medical course attained full recognition as a four-year program. In 1973, the School of Medicine created a Department of Medical Allied Health Professions in which the Division of Physical Therapy is located.

The four-year undergraduate curriculum, as offered by the University and leading to a Bachelor of Science Degree in Physical Therapy, is approved by the Council on Medical Education of the American Medical Association and the American Physical Therapy Association. Graduates are eligible to apply for state and national registration and accreditation.

Combined teaching and service facilities include the Medical Science Building with laboratories, classrooms, and offices of the basic science departments; a Research Wing of the Medical Science Building, dedicated in 1962; a five-floor Clinic Building with research laboratories, outpatient department, auditorium, and library; North Carolina Memorial Hospital completed in 1952 as an acute, general, referral, teaching facility with 421 beds including an Intensive Care Unit and Pediatric Isolation Facilities; a 70-bed Psychiatric Unit added in 1953 includes, until other facilities are available, the Clinical Research Unit with 15 beds; and Child Development Center, opened in 1971. The Hand Rehabilitation Center, which opened in July, 1962, provides low-cost ambulatory

living quarters for approximately 16 patients with hand disabilities while they are in need of extensive and prolonged professional treatment in physical and occupational therapy.

A new wing of the Hospital was completed in the fall of 1969 and includes enlarged and improved facilities for the Department of Physical Therapy. These facilities provide greater opportunity for an expanded program of clinical experience for students in the Curriculum of Physical Therapy. A major building program to continue during the next few years, anticipates a 700-bed Hospital to be subsequently in operation and an expanded basic science unit.

Long-range planning and cooperative efforts will ensure continued progress in the maintenance of the University as a center of education and service contributing to the health and welfare of the people of North Carolina.

PHYSICAL THERAPY

The usual immediate concept of physical therapy is as a direct service of treatment with selective modalities of physical agents to patients in the hospital setting. Concurrent with the increase in knowledge in the physical and social sciences and with the changing patterns of medical care, physical therapy as a health profession is continuing to expand and to contribute on a much broader basis.

The physical therapist assists the physician in diagnosis and in attainment of his objectives of treatment by providing him with the results of testing procedures and by employment of the effective properties of physical agents, of biomechanical and neurophysiological principles, and of assistive devices. Physical therapists work with patients who have a variety of diagnoses and with all age groups—with developmental and birth defects and medical and orthopedic conditions of the newborn and pediatric patient, with disabilities resulting from increased accident and survival rate, and with the physical problems concomitant with the aging population.

The philosophy of physical therapy is expanding from a direct service of evaluation and treatment of disease to encompass a focus on health promotion with anticipatory treatment and prevention of disease and injury. Physical therapy extends beyond direct service alone through teaching and supervision of patients and families and through consultation with other services and community agencies. Availability of the services of the profession is increasing with programs functioning for out-of-hospital care, in

nursing homes, and through public health agencies. The needs of the patient remain of paramount importance regardless of his location or the locations of the service.

Today's physical therapist must be able to think, to accept responsibility, and to exercise good judgment; to analyze and to solve problems; to observe the patient's response to treatment and to adapt procedures to meet the individual's needs; to evaluate and to establish realistic goals; to use intellectual skill in creating and organizing programs of treatment, and to teach and to supervise supportive personnel and family members who will assist in providing continuity of care to the patient.

Physical therapy indeed offers a vital, stimulating, and challenging career to men and women interested in the health and welfare of individuals in today's society. Employment opportunities are extremely varied and almost unlimited. As examples, physical therapists are employed in general community hospitals, childrens hospitals and treatment centers, rehabilitation centers, nursing homes, public health agencies, state institutions, and teaching centers. Opportunities for advancement in practice, teaching, administration, and research are excellent.

AIMS OF CURRICULUM

The aims of the Curriculum in Physical Therapy are therefore to prepare physical therapists, through theoretical and practical instruction, to function as a member of the health team, to contribute to the well-being and restoration of the health of the patient with both professional skill and intelligent and sympathetic understanding.

The Curriculum is designed to provide students with a basis for advanced work and graduate study in allied fields, for research activities, and for administrative and teaching responsibilities.

Qualifications for a career in physical therapy are similar to those for other professions in the health field. The essentials are general good health, tact, emotional stability, personal integrity, and interest in science and the medical field, as well as a sincere interest in the welfare of man. Because of higher standards and greater selectivity, academic achievement and sincere motivation are of great importance.

GENERAL PLAN OF INSTRUCTION

The School of Medicine of the University grants the Degree of Bachelor of Science in Physical Therapy to the student who satisfactorily completes the program of study. The program is designed

to be completed in four calendar years. During the first two years the student completes a prescribed curriculum in the General College of the University or may complete his work at another accredited college or university. **Students wishing to transfer to the Chapel Hill campus should maintain a close liaison with the staff of the Division of Physical Therapy to assure proper planning of courses.** The third and fourth years, consisting of courses in the Division of Physical Therapy, Department of Medical Allied Health Professions of the School of Medicine, must be completed at the University in Chapel Hill.

Registration in the first two years on the Chapel Hill campus or elsewhere does not automatically assure the student of a place in the junior class. As enrollment in the last two years is limited, students will be accepted on a competitive basis and selections will be based on scholastic standing and upon character and personal fitness, as well as a sincere interest in physical therapy as a professional career. **Final selection of students for the third and fourth years is made by the Committee on Admissions.** The sequence of courses in the last two years begins in August only and cannot be altered.

Students of all races are equally welcome in the University of North Carolina. Persons of all racial background may apply for and accept admission, confident that the policy and regular practice of the institution will protect them from discrimination.

ADMISSION REQUIREMENTS

Applicants for admission to the freshman year of the pre-physical therapy curriculum must meet the requirements of the General College of the University. The units required for admission are as follows: English, 4 units; one foreign language, 2 units; algebra, 1½ units; plane geometry, 1 unit; History of the United States, 1 unit; a natural science, 1 unit; 2½ academic units elective, and 2 units elective which may be in non-academic or vocational subjects. Academic and elective credits in the natural sciences and mathematics are recommended. Satisfactory scores (over 900) on the Scholastic Aptitude Tests of the College Entrance Examination Board are required.

Applicants for transfer to the University at the junior year should refer to the paragraph on the Physical Therapy Curriculum for specific course requirements. (Page 22)

A non-refundable application fee of \$10.00 must be submitted

tutions must be provided by the students. This expense is incurred primarily in the spring of the senior year and during the summer months when clinical experience programs are scheduled away from Chapel Hill.

Juniors and seniors are encouraged to apply for student membership in the American Physical Therapy Association (\$15.00 yearly), and will be qualified for transfer to full membership upon completion of the outlined program of study. Graduates planning to practice physical therapy in North Carolina must comply with legal registration requirements immediately after graduation or at the time of employment (\$65.00). Those planning to practice in other states may be required to register or to be licensed (\$5.00-\$75.00).

RESIDENCE STATUS FOR TUITION PAYMENT*

General. Every applicant for admission is required to make a statement as to his or her length of residence in North Carolina. The tuition charge for legal residents of North Carolina is less than for nonresidents. To qualify for in-state tuition a legal resident must have maintained his domicile in North Carolina for at least 12 months immediately prior to his classification as a resident for tuition purposes. In order to be eligible for such classification, the student must establish that his or her presence in the State during such twelve-month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education.

Domicile. Domicile means one's permanent dwelling place of indefinite duration, as distinguished from a temporary place of abode; synonymous with "legal residence."

Burden of Proof and Statutory Presumptions. The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification. For a student to be classified a resident for tuition purposes, the balancing of all the evidence must produce a clear preponderance of the evidence supporting the assertion of in-state residence. Proof of residential status is controlled, initially, by two

*The information in this section comes from three sources: (i) North Carolina General Statutes, Sec. 116-143.1; (ii) A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes, July 1975; (iii) Chancellor's Rules and Procedures for Residence Classification of Students for Tuition Purposes.

statutorily prescribed and complementary presumptions, which are stated in terms of prima facie evidence:

a. If the parents or court-appointed legal guardian of the student (without reference to the question of whether the student is a minor or an adult) are not domiciliaries (legal residents) of North Carolina, under the Statute this fact constitutes prima facie evidence that the student is not a domiciliary (legal resident), of North Carolina, unless the student has lived in this State the five consecutive years prior to enrolling or re-registering. The student must assume the burden of rebutting the prima facie showing by producing evidence that he or she, independently, is in fact a domiciliary (legal resident) of North Carolina, in spite of the nonresident status of his or her parents;

b. Conversely, if the parents of the student are domiciliaries of North Carolina under the Statute, this fact constitutes prima facie evidence that the student is a domiciliary of North Carolina. This prima facie evidence may also be rebutted by other evidence of legal residence. If the student has neither parents nor legal guardian, the prescribed prima facie evidence rule cannot and does not apply.

Statutory Exceptions

a. *Grace Period.* By virtue of the provisions of G.S. 116-143.1, if a student has been properly classified as a resident for tuition purposes, a change in that student's state of residence thereafter does not effect in all cases an immediate automatic loss of entitlement to the in-state tuition rate. To qualify for the grace period, the following conditions must be satisfied:

1. The student must have been properly classified as a resident for tuition purposes, on the basis of a valid finding that the student in fact was a legal resident of North Carolina and had been such for the requisite twelve-month period prior to classification;

2. At the time of subsequent change of legal residence to a state other than North Carolina, the student must have been enrolled in a public institution of higher education in North Carolina.

The extent of this grace period, during which the in-state rate is applicable in spite of the fact that the student is not a legal resident of North Carolina, is twelve months from the date of change in legal residence, plus any portion of a semester or aca-

demic term remaining, as of the expiration date of the twelve-month period, in which the student is enrolled.

b. *Qualifying Periods for Spouses.* By virtue of the provisions of G.S. 116-143.1, the prescribed twelve-month period of legal residence required for entitlement to classification as a resident for tuition purposes may be shortened on the basis of the marital status of the student, in specified circumstances. If a student otherwise can demonstrate compliance with the fundamental statutory requirement that he or she be a legal resident of North Carolina, the second statutory requirement relating to duration of residence may be satisfied derivatively, in less than twelve months, by reference to the length of the legal residence of the spouse of the student, if the spouse has been a legal resident of the State for the requisite twelve-month period.

Married Persons. The domicile of a married person, irrespective of sex, is determined by reference to all relevant evidence of domiciliary intent. No person shall be precluded, solely by reason of marriage to a person domiciled outside of North Carolina, from establishing or maintaining legal residence in North Carolina. No person shall be deemed, solely by reason of marriage to a person domiciled in North Carolina to have established or maintained a legal residence in North Carolina. The fact of marriage and the place of domicile of his or her spouse shall be deemed relevant evidence to be considered in ascertaining domiciliary intent.

Minors. A minor is any person who has not reached the age of eighteen years. The domicile of a minor is that of the father. With a few exceptions noted below, this presumption is virtually irrefutable. If the father is deceased, the domicile of the minor is that of the surviving mother. If the parents are divorced or legally separated, the domicile of the minor is that of the parent having custody by virtue of a court order; or, if no custody has been granted by virtue of court order, the domicile of the minor is that of the parent with whom he lives; or, if the minor lives with neither parent, in the absence of a custody award, the domicile of the minor is presumed to remain that of the father. Even though a person is a minor, under certain circumstances the person may be treated by the law as being sufficiently independent from his parents as to enjoy a species of adulthood for legal purposes. The consequences, for present purposes, of such circumstances is that the affected person is presumed to be capable of establishing a domi-

cile independent of that of the parents; it remains for that person to demonstrate that a separate domicile in fact has been established. The circumstances recognized as having the potentially emancipating effect are:

a. Marriage of the minor person;

b. Parental disclaimer of entitlement to the minor's earnings and the minor's proclamation and actual experience of financial independence from his parents, with the actual establishment and maintenance of a separate and independent place of residence.

Aliens. An alien holding a visa which will permit eventual permanent residence in the United States is subject to the same considerations as a citizen. An alien holding a visa which will not permit eventual permanent residence in the United States (for example, a student visa) cannot be classified as a resident.

Military Personnel. The domicile of a person employed by the Federal Government is not necessarily affected by assignment in or reassignment out of North Carolina. Such a person may establish domicile for himself by the usual requirements of residential act plus intent. No person shall lose his in-state residence status solely by serving in the armed forces outside of the State of North Carolina.

Property and Taxes. Ownership of property in or payment of taxes to the State of North Carolina apart from legal residence will not qualify one for the in-state tuition rate.

Change of Status. A student admitted to initial enrollment in an institution (or permitted to re-enroll following an absence from the institutional program which involved a formal withdrawal from enrollment) shall be classified by the admitting institution either as a resident or as a nonresident for tuition purposes prior to actual matriculation. A residential classification once assigned (and confirmed pursuant to any appellate process invoked) may be changed thereafter (with corresponding change in billing rates) only at intervals corresponding with the established primary divisions of the academic calendar.

Transfer Students. When a student transfers from one North Carolina public institution of higher education to another, he or she is treated as a new student by the institution to which he or she is transferring and must be assigned an initial Residential Classification for tuition purposes.

The transfer into or admission to a different component of the same institution (e.g., from an undergraduate to a graduate or professional program) is not construed as a transfer from one institution to another and, thus, does not by itself require a reclassification inquiry unless (1) the affected student requests a reclassification inquiry or (2) the transfer or enrollment occurs following the lapse of more than one quarter, semester, or term during which the individual was not enrolled as a student.

Responsibility of Students. Any student or prospective student in doubt concerning his residence status must bear the responsibility for securing a ruling by stating his or her case in writing to the admissions officer. The student who, due to subsequent events, becomes eligible for a change in classification, whether from out-of-state to in-state or the reverse, has the responsibility of immediately informing the Office of Admission of these circumstances in writing. Failure to give complete and correct information regarding residence constitutes grounds for disciplinary action.

It is the responsibility of the student to pay tuition at the rate charged and billed while an appeal is pending. In effect, the student who is classified as a nonresident at the time of tuition billing should pay the nonresident rate. Conversely, if a student is classified as a resident at the time of billing, he or she should pay the resident rate.

Appeals of Rulings of Admission Officers. A student appeal of a classification decision made by any admissions officer shall be filed by the student with that officer in writing and shall be transmitted to the Residence Status Committee by that officer, who shall not vote in that Committee on the disposition of such appeal. The student shall be notified of the date set for consideration of the appeal and, on request of the student, he or she shall be afforded an opportunity to appear and be heard by the Committee. Any student desiring to appeal a decision of the Residence Status Committee shall give notice in writing of that fact within 10 days of receipt by the student of the decision of the Residence Status Committee, and the basis for such appeal, to the Chairman of the Residence Status Committee, and the Chairman shall promptly transmit the appeal to the State Residence Committee.

A complete explanation of the statute and the procedures under the statute is contained in **A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student**

Residence Classification for Tuition Purposes. This manual and other information concerning the application of this law is available for inspection in the Admissions Offices of the University.

All students are responsible for knowledge of the contents of the statute and the **Manual**.

NOTICE ON "DIRECTORY INFORMATION" TO ALL STUDENTS OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The University of North Carolina at Chapel Hill has routinely made public certain information about its students. Some typical ways this has been done include the following: names of students who are selected by the various honorary societies, who receive scholarships, who make the Dean's List, who hold offices, or who are members of athletic teams are frequently made public. To facilitate campus communication the University annually publishes the **Campus Directory**. Some professional and graduate school student groups publish directories of students in their departments or schools. The annual commencement program publishes the names of persons who have received degrees during the year.

The Family Education Rights and Privacy Act defines the term "directory information" to include the following categories of information: the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The University will make public information about each student **limited** to these categories in ways such as those described above. Of course, information from all these categories is not made public in every listing. The **Campus Directory** for example, publishes only names, addresses and telephone numbers.

If you do not wish to have any or all of such "directory information" about you made public without your prior consent, you must notify the Office of Records and Registration, The University of North Carolina at Chapel Hill of this fact in a signed and dated statement specifying items you do not want published. You must give this notice to the Office of Records and Registration by the end of the registration period for the semester or session in which you first enroll or, after an absence, re-enroll, and by the end of **each** fall registration period thereafter until you are no longer a student at The University of North Carolina at Chapel Hill.

LOANS AND SCHOLARSHIPS

Information on loans, University scholarships, and self-help employment may be obtained from the Director of Student Aid. Freshmen accepted for a course of studies approved by the Division of Physical Therapy are eligible to apply to their local National Foundation Chapters for health scholarships. Other local scholarships are known to be available.

Information on scholarships for junior and senior physical therapy students may be obtained from the Director, Division of Physical Therapy. Several are available from national and state groups. Others are awarded by the scholarship committee of the Curriculum in Physical Therapy. Four scholarships are available under the James Kirkpatrick Norfleet Scholarships, two for juniors at \$200 each, and two for seniors at \$300 each.

For residents of North Carolina loans up to \$1,000 per year for sophomore, junior, and senior years are available from The North Carolina Medical Care Commission. If the graduate practices Physical Therapy in specified communities and programs in North Carolina, the loan payment for each year is cancelled.

The United States Air Force and the United States Navy offer commissions to women who have been accepted to the senior year of college work in physical therapy and who can meet age, health, and other requirements.

PHYSICAL THERAPY CURRICULUM

Following, in outline form, is the General College freshman and sophomore program at the University which must be completed before students can be accepted for admission to the junior year of study. Transfer students applying for admission with junior standing from institutions other than the General College of the University must present equivalent courses comprising two years of college work (not less than 60 semester hours, exclusive of physical education credits). These courses must be accepted by the Admissions Office in order for the student to be eligible to transfer to The University of North Carolina at Chapel Hill. **To assure transfer of credits, courses to be taken on other campuses should be approved by the Admissions Office before the student enrolls in each course.**

BACHELOR OF SCIENCE DEGREE IN PHYSICAL THERAPY

Freshman Year

First Semester	Credits	Second Semester	Credits
English 1	3	English 2	3
Chem. 11, 11L	4	Chemistry 21, 21L	4
*Mathematics 31, 31C or 1	3	2nd Math. OR—	
Elective 1	3	Math. substitute	3
Humanities and		Social Science 1	3
Fine Arts 1	3	Elective 2	3
Physical Education 1	1	Physical Education 2	1
	<hr style="width: 50%; margin: 0 auto;"/>		<hr style="width: 50%; margin: 0 auto;"/>
	17 Sem. Hrs.		17 Sem. Hrs.

*Math. 1 or 31 and a second Mathematics course or a Mathematics substitute are required. The second Mathematics course or Mathematics substitute may be selected from:

- Mathematics 3, 2, 21, 32
- Statistics 11, 12
- Philosophy 21
- Computer 16, 17, 18, 19.

Sophomore Year

Third Semester	Credits	Fourth Semester	Credits
Psychology 10 (General)	3	Elective 3 (Psych. recommended)	3
**Physics 24, 24L	4	Elective 4 (Physics 25 or other)	4
Zoology 11, 11L	4	Zoology 41, 41L	4
Social Science 2	3	Elective 5	3
Humanities &		Elective 6	3
Fine Arts 2	3		
	<hr style="width: 50%; margin: 0 auto;"/>		<hr style="width: 50%; margin: 0 auto;"/>
	17 Sem. Hrs.		17 Sem. Hrs.

**Physics 24 is offered only in the Fall of each year at UNC-CH

UNC-CH Freshman Language: Language 1 and 2 must be satisfied at admission or after enrollment. If after enrollment, Language 1 and 2 would count as two of the 20 courses. Students desiring to take Language 3 and 4 would receive credit for two Humanities.

Transfer students are not required to take a language for transfer unless their home institution requires it.

Not more than 4 courses may be selected from a single department or course area, including those in the Social Sciences and Humanities & Fine Arts.

Junior Year

- Neuroanatomy (Anatomy 93) (3)
- Gross Anatomy (Anatomy 191 a & b) (8)
- Physiology (Physiology 94) (5)

- Clinical Education I (Physical Therapy 68) (2)
- Patient Care and Evaluation (Physical Therapy 70) (6)
- Human Growth and Development (Physical Therapy 80) (3)
- Physical Therapy Procedures (Physical Therapy 83) (4)
- Functional Anatomy (Physical Therapy 90) (3)
- Physical Evaluation and Exercise (Physical Therapy 93) (4)
- Communication for Physical Therapy (Physical Therapy 175a) (2)

Senior Year

- Histology (Anatomy 92) (2)
- Pathology (Pathology 90) (3)
- Community Health (Physical Therapy 76) (3)
- Clinical Education II (Physical Therapy 78) (2)
- Medical Science (Physical Therapy 81) (3)
- Psychiatry and Mental Health (Physical Therapy 82) (3)
- Physical Therapy Procedures and Evaluation (Physical Therapy 84) (6)
- Clinical Education III (Physical Therapy 88) (4)
- Comprehensive Program Planning (Physical Therapy 95) (1)
- Electrotherapy (Physical Therapy 172) (3)
- Communication for Physical Therapy (Physical Therapy 175bc) (3)
- Organization and Administration of a Physical Therapy Service (Physical Therapy 177) (3)

Summer Session (12 weeks)

- Clinical Education IV (Physical Therapy 98) (7)

For additional information regarding the Physical Therapy Curriculum, direct inquiries to: Director, Division of Physical Therapy, Department of Medical Allied Health Professions, School of Medicine, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.

A copy of the Undergraduate Bulletin and application materials for admission may be obtained from: Admissions Office, Monogram Club, Country Club Road, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.

CURRICULUM IN PHYSICAL THERAPY

COURSE DESCRIPTIONS

Third and Fourth Years of Study, School of Medicine, Semester System

ANAT 191ab GROSS ANATOMY (8)

By means of dissection of the human cadaver, together with lectures and demonstrations, the development and functional aspects of the regions of the body under study are emphasized. As the material is presented, the clinical significance of anatomical structures is stressed. Singleton.

ANAT 92 HISTOLOGY (2)

The course includes a study of structure and function of the animal cell and the histology and development of the tissues. Laboratory consists chiefly of microscopic study of histologic material. Singleton; staff.

ANAT 93 NEUROANATOMY (3)

This course consists of a study of the brain and spinal cord with consideration given to clinical significance of anatomical structures. Specimens of human brain and spinal cord provide laboratory material. Singleton.

PHYI 94 INTRODUCTION TO PHYSIOLOGY (5)

A general course with lectures and laboratory hours in mammalian physiology with emphasis on the various organ systems and their interrelationships. Ennis.

PATH 90 PATHOLOGY (3)

Selected demonstrations and lectures embracing a consideration of general and special pathology are presented to the physical therapy students. These are combined in a study of disease mechanisms involved in inflammation and repair; infection; degenerative processes and disturbances in metabolism; circulatory disturbances; and disorders of growth including tumors. The systems of the body are studied from the point of view of histological and functional change. Geratz.

PHYT 70 PATIENT CARE AND EVALUATION (6)

A general orientation to physical therapy and allied health development, including ethics and professional/interpersonal relationships, is presented. Students receive instruction in basic patient care procedures from Nursing Inservice Department and physical therapy faculty and discuss the patient's and the professional's reaction to disability. Basic evaluation and treatment procedures, with their physical and physiological bases, are included. Students have the opportunity to observe and to practice their skills, with supervision, on the patient units (with nursing personnel) and in the Physical Therapy Department. Yundt; staff.

PHYT 83 PHYSICAL THERAPY PROCEDURES (4)

The physics and physiological effects of light, heat, cold, ultrasound, high frequency electrical currents, and water are presented as they relate to the treatment of indicated pathological conditions. The principles of massage and

taping for athletic injuries are included. The principles and methods of teaching and supervising supportive personnel in relation to these modalities are incorporated into the course content. Woodruff, staff.

PHYT 84 PHYSICAL THERAPY PROCEDURES AND EVALUATION (6)

This course emphasizes a neurophysiological approach to therapeutic exercise; evaluation and treatment of patients following cerebrovascular accidents; evaluation and treatment of the brain injured child; rehabilitation techniques; management of the upper extremity amputee; occupational behavior; disability evaluation; miscellaneous evaluation methods and neurological evaluation. Johnson; staff.

PHYT 90 FUNCTIONAL ANATOMY (3)

A study is made of the functional aspects of the musculo-skeletal and neuromuscular system, including biomechanics along with an analysis of muscle and joint action in activities, gaits, and skills. Abnormal functions due to physical disabilities and disturbances in motor patterns are analyzed and discussed. Johnson; staff.

PHYT 93 PHYSICAL EVALUATION AND EXERCISE (4)

The principles and techniques of mobilization, exercise programs and equipment, and home programs are presented. The student learns evaluation and treatment techniques involved with obstetrics, peripheral vascular problems, and posture and scoliosis. An exposure to occupational behavior, disability evaluation and upper extremity prosthetics is included. Elements of recording, analyzing and communicating results as appropriate are presented. Reiner; staff.

PHYT 95 COMPREHENSIVE PROGRAM PLANNING (1)

The student learns to integrate knowledge and skills from previous courses to identify problems, establish goals and develop comprehensive physical therapy programs. Included are programs related to selected disorders, and planning of health programs involving the physical therapist. Nelson.

PHYT 80 HUMAN GROWTH AND DEVELOPMENT (3)

Lectures, demonstrations, and case presentations in growth and development from conception through adulthood are presented throughout the semester. Emphasis is given to the stages in life during which greatest changes occur, and developmental defects related to each. Staff.

PHYT 81 MEDICAL SCIENCE (3)

Selected lectures and case presentations in the medical surgical specialties covering subjects in neurology, dermatology, hematology, cardiology, pulmonary medicine, otolaryngology, thoracic surgery, radiology, orthopaedics, anesthesiology, vascular surgery, neurosurgery, and plastic surgery are presented throughout the semester. Staff of School of Medicine and North Carolina Memorial Hospital.

PHYT 82 PSYCHIATRY AND MENTAL HEALTH (3)

An overview of the principles of psychiatry as related to patient care needs in physical therapy is presented. Subject matter areas include personality

development, mental mechanisms, psychopathology, psychiatric illness, reactions to illness, psychiatric treatments, child psychiatry, and psychological testing. The organizational structure and the role of the physical therapist in the North Carolina Department of Mental Health and an overview of the mental health hospital is discussed. Department of Psychiatry; Schuch.

PHYT 76 COMMUNITY HEALTH (3)

The current scope, methods, resources, activities and trends in health maintenance and health delivery are presented. Attitudes regarding health needs of the people, and programming of service to meet these needs are discussed. The educational preparation and role of selected health workers, and the influence of health personnel and programs on the community are discussed or demonstrated through seminars and visits to facilities. Nelson, Stang; staff.

PHYT 172 ELECTROTHERAPY (3)

This course includes the physical aspects, physiological effects, indications, and contraindications of electrical currents and their therapeutic value. The basic principles and techniques of electrodiagnostic testing, electromyography, and nerve conduction are included. Woodruff; staff.

PHYT 175abc COMMUNICATION FOR PHYSICAL THERAPY (5)

Oral, written and visual communication as related to physical therapy is the basic consideration throughout this three-semester course. Assignments include library projects, abstracts, evaluation of current scientific literature, questionnaire and interviewing technique, and a senior paper. Among other topics considered are the elements of experimental design, methods of data collection, statistics, methods of teaching/learning, oral presentations, audio-visual materials, and group process. LeVeau; staff.

PHYT 177 ORGANIZATION AND ADMINISTRATION OF A PHYSICAL THERAPY SERVICE (3)

This course includes materials on planning, organizing, and managing a physical therapy service in an institution or agency. It deals with personnel, supervision, facility planning, fiscal management, communications, and medical-legal aspects of service programs. Lectures, group-problem solving, and projects are some of the class methods utilized. Howes; staff.

PHYT 68 CLINICAL EDUCATION I (2)

Course work consists of observing and performing, with supervision, techniques learned in class on patients in a variety of clinical settings. A major objective of the course is to understand the role of the physical therapist in many different settings. Health team conferences are attended; responsibility of physical therapy personnel discussed; and surgical procedures observed. Reiner, Woodruff.

PHYT 78 CLINICAL EDUCATION II (2)

The physical therapy student gains skill in clinical procedures and interaction with patients and professional personnel as he practices, under supervision, techniques learned in the classroom. He also learns how experienced clinical teaching staff apply, modify, and adapt these skills to each individual patient. During this period he becomes familiar with many aspects of total

patient care as presented in acute hospital departments, outpatient services, and through home care and referral programs. Nelson; staff.

PHYT 88 CLINICAL EDUCATION III (4)

In this program of supervised clinical education experience, the student is assigned his own patients, organizes and administers physical therapy, follows patients through much of their total hospital stay, gives home instructions, cooperates in a referral program to insure proper follow-up care, and may make home visits with public health physical therapists. Rotation through services of a teaching hospital and experiences in nearby hospitals and facilities provides a variety of patient-centered experiences. Stang, Flowers; staff.

PHYT 98 CLINICAL EDUCATION IV (7)

Through affiliations with agencies, hospitals, and selected special treatment centers, a program of clinical education experience, to include a variety of patients, evaluation and treatment techniques, teaching, supervisory, and administrative roles, is arranged for each physical therapy student. This twelve weeks of full-time summer affiliation follows completion of the senior year of academic studies. Medical direction and Physical Therapy supervision, Staff of the Affiliating Centers.

DIVISION OF PHYSICAL THERAPY GRADUATE PROGRAM

MASTER OF ARTS IN COLLEGE TEACHING WITH A MAJOR IN PHYSICAL THERAPY

The Division of Physical Therapy collaborates with the School of Education in offering a program leading to the Master of Arts in College Teaching (MACT) degree with the major work in physical therapy. The MACT is awarded by the Graduate School upon satisfactory completion of the program.

This is a forty-eight semester hour program taking about sixteen months full-time study for completion. Twelve hours are in education which includes time for internship in teaching in the area of physical therapy. Eighteen to twenty-one hours of course work are in physical therapy, the major area, with nine to twelve additional hours in physical therapy or in a second department and six to nine hours in allied subjects. Depending on the interest of the student, courses in allied or related subjects may be taken in any number of other university schools or departments. Students have the option of pursuing teaching interests either in the two-year or the four-year college. Previous physical therapy experience of at least one year is required for admission into the MACT program.

The supervised teaching (EDCI 360) may be done in the basic physical therapy curriculum on the Chapel Hill campus or may be

arranged in programs of other North Carolina universities or community colleges. Students can pursue specialty tracts as described in the general information and do their teaching practicum in that area.

The program is designed to prepare physical therapists for positions as faculty in basic educational programs for physical therapists, for physical therapist assistants, or for positions of clinical teaching.

ADMISSION REQUIREMENTS

1. A bachelor's degree and graduation from a physical therapy curriculum approved by the American Physical Therapy Association and the American Medical Association.
2. A grade point average of B or better in the professional physical therapy curriculum.
3. Submission of scores from the Aptitude Section of the Graduate Record Examination.
4. Three letters of recommendation.

CURRICULUM

Physical therapy courses listed are available to graduate students enrolled in other areas of the University and may be utilized for a minor in physical therapy.

Courses included in the required twelve hours of course work to be taken in the School of Education are as follows:

*EDCI 260	THE TWO YEAR COLLEGE	3 hours
	or	
EDCI 261	HIGHER EDUCATION IN THE UNITED STATES	3 hours
EDCI 265	PRINCIPLES AND PRACTICES OF COLLEGE TEACHING	3 hours
EDCI 360	INTERNSHIP IN HIGHER EDUCATION	6 hours

For further information, see Catalogue, School of Education, Master of Arts in College Teaching.

*Students interested in the community college would take EDCI 260 while those interested in higher education would take EDCI 261.

This curriculum is especially designed to prepare physical therapists for positions as faculty in basic educational programs for physical therapists, for physical therapy assistants, or for positions of teaching in affiliated facilities where physical therapy students receive clinical education.

SPECIALTY AREAS

The following specialty areas are offered for the interests of graduate students in the Division of Physical Therapy. Faculty members with special education and experience in each of the areas serve as advisors and supervisors of student teaching practicums or research as well as instructors of courses on the specifically related content material. Students may pursue one of the particular areas or may design a program of study which includes courses from more than one area.

ADMINISTRATION. A program in administration is designed to provide knowledge, skills and insight into management of physical therapy services. It includes relevant courses in the Division of Physical Therapy and in other departments of the University. Clinical facilities in the North Carolina Memorial Hospital offer opportunities for the practicum. If the student has previous experience in this area, emphasis may be placed on specific areas of organization, administration or curriculum design. The subject of personnel management is an integral part of the program particularly in relation to the selection, training and supervision of employees.

BIOMECHANICS. The study of human motion relating mechanical analysis to anatomical structure is offered. Courses are conducted and research facilities are present in a newly constructed laboratory for investigation of movement. Methods of study include cinematography, stroboscopy, electromyography, electrogoniometry and force analysis.

CARDIAC REHABILITATION AND EXERCISE PHYSIOLOGY. A student interested in this area has an opportunity for advanced study in the area of exercise physiology and cardiac function. Pertinent courses are available in the Departments of Physiology and Physical Education, as well as in Physical Therapy. Clinical facilities for such study exist in the North Carolina Memorial Hospital. As a part of the program students learn to accurately monitor and individually design exercise programs for the cardiac patient.

CLINICAL EDUCATION. In addition to taking relevant courses in psychology, education and physical therapy, the student specializing in this area may organize and participate in supervision of the clinical education experience of students in the basic undergraduate physical therapist and physical therapist assistant programs. Clinical facilities for these curriculums include those at North Carolina Memorial Hospital as well as affiliated centers located throughout North Carolina.

ELECTRONEUROMYOGRAPHY AND ELECTROTHERAPY. A comprehensive program of study includes the principles and application of nerve conduction measurement, kinesiological and clinical electromyography and bioelectric feedback. Fundamental research applications and instrumentation are presented including demonstrations of quantitation by integrators and computer analysis. The student has an opportunity for intensive laboratory or clinical practice of electrophysiological applications in special interest areas.

NEUROPSYCHIATRY. A program designed for the student who wishes to acquire greater knowledge and skill related to persons with neuropsychiatric disorders. Courses are offered in neurology, psychiatry, physiology, psychology, public health and physical therapy. A variety of outstanding clinical resources are available at North Carolina Memorial Hospital in Chapel Hill and at state mental hospitals in two neighboring communities.

PEDIATRICS. The program in pediatric physical therapy is highly flexible to allow individuals with diverse background to plan a period of concentrated effort based on their interests and experience in pediatrics. Particular areas which may be explored include hemophilia, birth defects, developmental disabilities and mental retardation, cardiopulmonary problems, normal child development, high-risk infant care, and acute general hospital pediatric service.

SCIENCES BASIC TO PHYSICAL THERAPY. A variety of opportunities for study in areas of basic science is offered the graduate student in physical therapy. Specialties may be pursued in gross anatomy, neuroanatomy or physiology. Some courses in both the Departments of Anatomy and Physiology are crosslisted with physical therapy and courses in all basic science departments of the University are possible as electives. Laboratory teaching facilities are extensive including closed circuit television, single concept films, and other audiovisual resources. Classrooms and laboratories

are generously equipped; cadavers and necessary teaching material are included.

SPORTS MEDICINE. This program offers an outstanding opportunity for the graduate student to gain advanced physical therapy skill and to become a qualified athletic trainer. The necessary courses and work experience requisite for certification by the National Association of Athletic Trainers are possible through cooperation with the Department of Physical Education and the Division of Sports Medicine.

THERAPEUTIC EXERCISE. This specialty includes study of the principles, theory, application and critique of methods of therapeutic exercise. It encompasses evaluative procedures of patients with neurological deficits or disease. Approaches to physical therapy management of children with central nervous system dysfunction and neurological approaches to treatment of the adult are offered. Courses integrate neuromuscular maturation, neurophysiology, and the various neurodevelopmental theories of proprioceptive neuromuscular facilitation. Study of kinesiological and biomechanical principles of specific aspects of therapeutic exercise allow flexibility for particular student interests.

COURSE DESCRIPTIONS

PHYI 102 MAMMALIAN STRUCTURE AND FUNCTION (5)

A general course in vertebrate physiology with emphasis on morphological and functional correlations. Suitable for graduate students with a minimal biology background. Fall. Faust; staff.

PHYT 105 DISORDERS OF DEVELOPMENT AND LEARNING IN CHILDHOOD (2-3)

Prerequisite, permission of instructor. Interdisciplinary approach to developmental problems in children. Overview of etiological factors, diagnostic and management techniques. Lecture and discussion. Individual and group projects. Two lecture hours a week. Fall, spring and summer. Knobloch.

PHYT 139 ADVANCED PEDIATRIC ASSESSMENT AND PROGRAM PLANNING (3-6)

Prerequisite, permission of instructor. Laboratory for the physical therapist in diagnostic evaluation and program planning for children with developmental and/or learning problems. Six to twelve laboratory hours a week. Spring and summer. Parr.

PHYT 172 ELECTROTHERAPY (3)

Prerequisite, permission of instructor. The physical aspects, physiological effects, indications and contraindications of electrical currents and their thera-

peutic value. The basic principles and techniques of electrodiagnostic testing, electromyography, and nerve conduction are included. Fall. Woodruff.

PHYT 175 b, c COMMUNICATIONS FOR PHYSICAL THERAPY (1)

Prerequisite, permission of instructor. The use of audiovisual aids; writing for professional journals; and basic principles of research design for physical therapy. One lecture hour each week. Fall and spring. LeVeau.

PHYT 177 ORGANIZATION AND ADMINISTRATION OF A PHYSICAL THERAPY SERVICE (3)

Prerequisite, permission of instructor. Includes material on planning, organizing and managing a physical therapy service in an institution or agency. Deals with personnel, facility planning, fiscal management, communications and medical-legal aspects of service. Three lecture hours a week. Spring and summer. Schuch.

PHYT 180 INTRODUCTION TO HUMAN GROWTH AND DEVELOPMENT (4)

Prerequisite, permission of instructor. Emphasis is given to the stages in life during which greatest changes occur and developmental defects related to each. Included in the course is laboratory for study of developmental disorders and library investigation of current research in these areas. Fall. Staff.

ANAT 191 a, b GROSS ANATOMY (8)

Prerequisites, Zoology 11 and Zoology 41 or equivalents and permission of instructor. Dissection of the cadaver with study of developmental and structural aspects of regions of the body. Two lecture, one conference and six laboratory hours a week. Fall. Three lecture, one conference and eight laboratory hours a week for three weeks. Spring. Singleton.

ANAT 193 FUNCTIONAL NEUROANATOMY (3)

Prerequisites, Anatomy 191, Anatomy 107 or equivalent and permission of instructor. Study of the brain and spinal cord, including both lecture and laboratory. Spring and summer. Singleton.

PHYT 194 ADVANCED THERAPEUTIC EXERCISE (4)

Prerequisite, permission of instructor. An advanced course in therapeutic exercise including theory techniques, skills and analytical evaluation of neurophysiological approaches to therapeutic exercise. Includes lecture and laboratory. Spring and summer. Johnson.

PHYT 195 NEURODEVELOPMENTAL THEORIES OF BRAIN DYSFUNCTION (3)

Prerequisite, permission of instructor. Neurophysiological theory and application of neurodevelopmental (Rood and Bobath) approaches to understanding central nervous system dysfunction in children. Fall. Campbell.

HADM 243 LONG TERM ILLNESS AND DISABILITY (3)

Prerequisites, HADM 104 and EPID 160 or permission of instructor. Examines the impact of chronic disease and disability on the individual family, community and nation. The incidence and implications of chronic disease and disability over the entire age spectrum, recognizing the life-cycle significance and distinctive implications for the young, the grown-up and the old are examined. Spring. Phillips.

PHYT 272 ELECTRONEUROMYOGRAPHY (3)

Prerequisite, PHYT 172 or equivalent and permission of instructor. Electrophysiology and advanced electromyographic and nerve conduction studies for kinesiological, clinical and research applications are the bases for this course. Biomedical instrumentation and methods for analysis and quantitation of electromyographic data are included. Spring. Nelson.

HADM 276 LONG TERM CARE AND REHABILITATION (3)

Prerequisite, HADM 243 or permission of instructor. Existing and potential provisions for meeting needs of the chronically ill and disabled within the total health system and continuum of patient care. Philosophy and modalities of rehabilitation and human services. Deals with hospitals, rehabilitation centers, nursing homes and non-institutional alternatives for long-term care. Spring. Kavalier.

PHYT 277 PHYSICAL THERAPY CURRICULUM DEVELOPMENT AND ADMINISTRATION (3)

Prerequisite, permission of instructor. A study of the principles of curriculum design, content and administration for physical therapy professional and supportive personnel. Spring. Moore.

PHYT 290 ADVANCED KINESIOLOGY AND BIOMECHANICS (3)

Prerequisites, PHYT 90 or equivalent and permission of instructor. A biomechanical and neurophysiological approach to the study of normal and pathological motion. Two lecture and two laboratory hours a week. Fall and summer. LeVeau.

PHYT 291 ANALYSIS OF HUMAN MOTION (3)

Prerequisites, PHYT 90 or equivalent and permission of instructor. A lecture-laboratory course on the rationale and basic principles of stroboscopy, cinematography, electrogoniometry, dynamometry and electromyography, as means of evaluating the biomechanics of human motion. Spring and summer. LeVeau.

PHYT 295 PHYSICAL EVALUATION FOR PHYSICAL THERAPY (3)

Prerequisites, basic courses in physical evaluation or equivalent and permission of instructor. An indepth comparative study of the characteristics, validity and reliability of selected methods of physical evaluation appropriate to physical therapy. Fall and summer. Parker.

PHYT 301 SEMINAR IN PHYSICAL THERAPY (1)

Required of all graduate students in Physical Therapy. Group presentations and discussions by students and staff of selected topics related to physical therapy. Fall and spring. Staff.

PHYT 303 PROBLEMS IN PHYSICAL THERAPY (2-3)

Prerequisite, permission of instructor. Advanced study, analysis and discussion of issues related to the practice of physical therapy. Fall, spring, and summer. Staff.

PHYT 307 SEMINAR IN DISORDERS OF DEVELOPMENT AND LEARNING IN CHILDHOOD (2)

Prerequisite, permission of instructor. Seminar for students with prior background in child development or related areas on interdisciplinary diagnosis and management of developmental problems in childhood. Focus on staff and student prepared case material. Spring and summer. Knobloch.

PHYT 376 THE ALLIED HEALTH PROFESSIONS IN HEALTH CARE SYSTEMS (2)

Required of all graduate students in Physical Therapy. Seminar on current developments in the allied health professions and their relation to social, economic and health aspects of society. Fall and summer. Moore.

PHYT 377 READINGS IN SELECTED TOPICS IN PHYSICAL THERAPY (1-3)

Prerequisite, permission of instructor. The student explores areas of special interest pertinent to his eventual goals in physical therapy. Fall, spring and summer. Staff.

PHYT 380 SEMINAR IN PHYSICAL ASPECTS OF HUMAN GROWTH AND DEVELOPMENT (2)

Prerequisite PHYT 180 or equivalent and permission of instructor. Selected topics on health related aspects of development and aging in the individual. Fall, spring and summer. Campbell.

PHYT 381 NEURAL BASIS OF MOTOR CONTROL (3)

Prerequisites, anatomy, physiology and permission of instructor. Advanced study of the neurophysiological basis of motor control, including physiology of the motoneuron, methods of research and identification of unsolved problems in sensorimotor physiology. Spring. Campbell.

PHYT 382 DEVELOPMENTAL REFLEXES AND MOTOR CONTROL (3)

Prerequisite, permission of instructor. Advanced study of the emergence of developmental reflexes and reactions and their integration with voluntary motor behavior. Spring. Staff.

PHYT 383 EDUCATIONAL ASPECTS OF CLINICAL EDUCATION IN PHYSICAL THERAPY (2)

Corequisite, PHYT 383L. Prerequisites, PHYT 377, Readings in Clinical Education and permission of instructor. Application of the principles of teaching-learning and evaluation in the clinical setting; curriculum and program planning and integration of didactic education with clinical instruction; supervision and interpersonal relations; and continuing education for clinical faculty development. Two seminar hours a week. Fall, spring and summer. Parker, Stang.

PHYT 383L LABORATORY IN EDUCATIONAL ASPECTS OF CLINICAL EDUCATION IN PHYSICAL THERAPY (1)

Corequisite, PHYT 383. Prerequisite, permission of instructor. Offers experience with practical application of educational elements involved in clinical education as applicable to students and clinical facilities. Two laboratory hours a week. Fall, spring, and summer. Staff.

PHYT 384 ADMINISTRATIVE ASPECTS OF CLINICAL EDUCATION IN PHYSICAL THERAPY (2)

Corequisite 384L. Prerequisites, PHYT 377, Readings in Clinical Education; PHYT 177, Organization and Administration of a Physical Therapy Service or equivalent; and permission of instructor. The application of basic principles of administration pertaining to clinical education, such as: professional standards relating to students and clinical practice; medico-legal considerations; site selection; interinstitutional agreements; cost of clinical education; records and reporting; interpersonal and interdepartmental communications; and clinical faculty development. Two seminar hours a week. Fall, spring, and summer. Parker, Stang.

PHYT 384L LABORATORY IN ADMINISTRATIVE ASPECTS OF CLINICAL EDUCATION IN PHYSICAL THERAPY (1)

Corequisite, PHYT 384. Prerequisite, permission of instructor. Offers experience with practical application of administrative elements involved in clinical education as applicable to the students, the University, and the clinical facilities. Two laboratory hours a week. Fall, spring, and summer. Staff.

For further information direct inquiries to: Director of Graduate Studies, Division of Physical Therapy, Department of Medical Allied Health Professions, School of Medicine, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.

A copy of the Graduate Bulletin and application materials for admission may be obtained from: Graduate School Admissions Office, Steele Building, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.

