College of Education, Nursing and Health Professions

As a professional school, the College of Education, Nursing and Health Professions prepares students for careers in a variety of helping, educational, and health professions by providing opportunities to develop critical knowledge and relevant skills. The college is committed to provide professional development programs appropriate for the current and future needs of practicing professionals. In addition to on-campus courses and learning experiences, programs include internships or clinical placements conducted in conjunction with education, clinical, and community agencies in Greater Hartford. In the case of physical therapy candidates, clinical placements are available across the United States.

The Department of Education and Human Services offers undergraduate programs in Early Childhood Education, Elementary Education, Secondary English Education, and Integrated Elementary/Special Education; and graduate programs in Early Childhood Education, Early Childhood Education with Montessori, Elementary Education, and Educational Technology.* The Department of Educational Leadership offers a Doctoral Program in Education.

The Department of Nursing offers undergraduate and graduate programs for registered nurses. The undergraduate program is a B.S.N. program for registered nurses. Graduate programs are offered in Nursing Management, Nursing Education, and Public Health Nursing.

The Department of Health Sciences offers undergraduate programs in Health Science, Radiologic Technology, and Respiratory Care. The department offers programs leading to graduate study in chiropractic, podiatry, pharmacology, osteopathic medicine, and optometry.

The Department of Physical Therapy offers a Doctoral Program in Physical Therapy and a Master of Science in Prosthetics and Orthotics, open to those students who have completed an undergraduate bachelor’s-level degree and have satisfied all prerequisite course requirements and standards.

The Doctoral Program in Physical Therapy begins with a 10-week term in the summer.

Facilities

Hillyer Hall houses facilities for the Department of Education and Human Services: the dean’s offices, including academic services for the college; rooms for classes, seminars, and conferences; and an educational technology laboratory. There are many technology-ready classrooms affording the use of PowerPoint and Web-based presentations in classes.

The Charles A. Dana Hall offers facilities for the departments of Health Sciences and Physical Therapy. Features of the building are two Mali auditoriums, a computer laboratory, and individual research laboratories for graduate students and faculty. Dana Hall also has classrooms, faculty offices, science laboratories, seminar rooms, a simulated clinical laboratory, the Hoffman clinical/teaching skills laboratories, and a combined laboratory/classroom for radiologic technology and respiratory care.

The Beatrice Fox Auerbach Hall houses the administrative and faculty offices for the Department of Nursing and the Department of Educational Leadership.

The Educational Technology Laboratory provides computers, printers, and educational software. Supportive education materials are available for students of the Department of Education and Human Services and for area teachers to preview. Assistants are available to help students and teachers from area school districts.

Housed in Mortensen Library, the Education Curriculum Laboratory contains a recently updated collection of texts and instructional materials representative of those used in area school systems. Materials are available for use by teachers, human service professionals, and students.

*The College of Arts and Sciences offers a master’s program in school psychology (see page 63).
University of Hartford Magnet School

The University of Hartford Magnet School, a Hartford interdistrict magnet school, is a public magnet school on our private University campus. Fifty percent of the students attending this school come from Hartford; other students from any town may apply and are chosen through a lottery system. The school serves children from preschool through grade five, who attend an extended school day. Opened in 2001, the facility is housed in a building specifically designed to meet the needs of its students, teachers, and theoretical framework.

The magnet school’s curriculum is framed in the context of Howard Gardner’s theory of multiple intelligences. This theory supports the concept that all children have several intelligences, not just the linguistic and mathematical intelligences normally addressed by schools, and that these intelligences need to be nurtured to enable children to learn through their strengths while enhancing their weaker abilities.

The school serves as a model school for field work, practica, internships, and student teaching for University students in our teacher education, human services, counseling, educational leadership, and educational technology programs. Students from the nursing programs as well as from the health professions are involved in the magnet school, which also houses a family and wellness center.

The Esphyr Slobodkina Reading Room

Esphyr Slobodkina was a 1928 immigrant to our country who came from the small Siberian town of Cheliabinsk. She came to be not only a well-loved and respected children’s author/illustrator but also one of America’s greatest abstract artists. Her history and accomplishments are an inspiration for our teachers, early-childhood and elementary students, and the education community. The reading room dedicated in her name is available for reading to large and small groups of children and their parents, for conducting workshops for parents on reading to children, and for arts-related programming for children.

University Physical Therapy, LLC

Located in the Sports Center, University Physical Therapy, a private-practice corporation, is available for referrals and is used by the degree candidates in physical therapy for integrated clinical experiences.

Field and Clinical Placements

The Department of Education and Human Services has established relationships with area school systems and social service agencies that have resulted in many innovative programs. These reflect the college’s commitment to serving school and community needs by making full use of the talents of students and faculty.

Teacher education programs include extended periods of integrated professional instruction and experience in local public schools, providing the opportunities for students to apply knowledge and skills.

The Department of Educational Leadership offers internship placements in a variety of settings. Students identify and plan these experiences under the supervision of an assigned faculty member.

The Department of Nursing has contracts with approximately 40 clinical agencies in the Greater Hartford area and around the state. Acute care, long-term care facilities, and community agencies, including public schools and homeless shelters, are used to provide educational experiences.

The Department of Physical Therapy maintains clinical affiliation contracts with major healthcare agencies in the region and more than 400 throughout the nation. These agencies provide clinical experience opportunities for students in physical therapy.

Academic Regulations

Time Limit and Transfer Credit

The master’s degree must be completed within six years, beginning with the initiation of course work toward the degree. Generally, a maximum of 6 graduate credits may be transferred from an accredited institution. These 6 credits will be transferred only if they have not been applied toward an earned degree and if they have relevance to the student’s planned program of study. Transfer credits must carry a grade of B or better.
Scholastic Requirements
The minimum grade point average (GPA) required for the master’s degree is 3.0. A higher average in the field of specialization may be required. A student whose grade point average falls below 3.0 or who receives a grade below C will be reviewed by the Academic Standing Committee and is subject to dismissal. The required GPA for students enrolled in the Doctoral Program in Educational Leadership is 3.5. Graduate students who do not meet the GPA standards will be placed on academic probation.

Comprehensive Examinations and Other Culminating Experiences Required for Degree Completion
Master’s degree candidates are required to complete a comprehensive examination or other culminating experience. Candidates for the Master of Science in Nursing in all three specialties develop a research proposal, carry out a project, and write an article suitable for professional publication. Information on Praxis II test dates is available in the Department of Education and Human Services office, Hillyer 252. Students should consult with their advisors for specific program requirements.

Successful completion of a comprehensive exam or other requirement is necessary within the six-year period, beginning with the initiation of course work toward the degree. Retakes of an exam or any sections thereof must be completed within the six-year period.

Comprehensive exams are offered during fall, spring, and summer semesters on scheduled dates. It is the students’ responsibility to be acquainted with the requirements for this examination.

More detailed information about the comprehensive exams, research/demonstration projects, and other culminating experiences, along with policies and procedures, are available from the department in which the student is enrolled.

Withdrawal
An official withdrawal form must be filed with the registrar. A student who does not complete a course and does not officially withdraw from it may receive a failing grade. Students should consult the current academic calendar for the withdrawal deadline (see page 41).

Application for a Degree
General requirements and procedures for application for a degree and graduation are described on page 33.

Accreditations and Memberships

Department of Education and Human Services

NCATE and State of Connecticut
Certification programs in the College of Education, Nursing and Health Professions are approved by the National Council for Accreditation of Teacher Education (NCATE) as well as the State of Connecticut Department of Education.

CT-AACTE
The American Association of Colleges for Teacher Education, Connecticut chapter (CT-AACTE), is an organization of colleges and universities approved for the preparation of professional personnel for the public schools. The organization meets regularly to discuss issues of mutual concern and advises the State of Connecticut Department of Education and the State of Connecticut Department of Higher Education on important issues in teacher education and personnel preparation.

Kappa Delta Pi
Kappa Delta Pi is an international honor society in education. Its members exhibit successful academic achievement, dedication to the ideals of education, and a desire to help others. Graduate and undergraduate students who exhibit high academic standing and a commitment to education are invited to become members. In addition to involvement in activities as a society member, Kappa Delta Pi offers members national scholarship funds, a Laureate Award to honored educators, and publications, such as the KDP Record and Educational Forum. The Pi Phi Chapter at the University of Hartford is an active participant in campus activities, conducting fund drives and service projects for the improvement of children’s education in the community.
Department of Nursing
The Master of Science in Nursing program is accredited by the State of Connecticut Board of Governors for Higher Education and by the Commission on Collegiate Nursing Education (CCNE). CCNE maintains program information on tuition, fees, and length of program. Contact CCNE at One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; 202.887.6791.

Sigma Theta Tau International, Iota Upsilon Chapter-at-Large
This honor society recognizes superior achievement and leadership qualities, fosters high professional standards, encourages creative work, and strengthens commitment to the ideals and purposes of the profession. Membership is by invitation for students who demonstrate excellence in the nursing program and for community leaders who have demonstrated excellence in leadership in nursing. The chapter is jointly sponsored by the Nursing departments of the University of Hartford, Saint Joseph College, and Central Connecticut State University.

Department of Physical Therapy
The Doctor of Physical Therapy program is accredited by the Commission on Accreditation of Physical Therapy Education of the American Physical Therapy Association. The Doctor of Physical Therapy program was also approved by the Department of Higher Education, State of Connecticut, in 2005. Upon completion of the clinical requirements of this program, students are eligible to sit for the professional state licensure examination.

The foundational curriculum for the Master of Science in Prosthetics and Orthotics is fully accredited by the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756; 727.210.2350. The program was approved by the Department of Higher Education, State of Connecticut, in 2009. Upon completion of the program requirements, students are eligible for their two-year professional residency.

Department of Education and Human Services

Graduate Degree Programs
The College of Education, Nursing and Health Professions awards master’s degrees in Early Childhood Education, Elementary Education, and Educational Technology. All of these programs are framed within the concepts and practice of the reflective practitioner: students develop their professional skills and knowledge while engaged in reflective practice.

The Department of Educational Leadership offers a Doctor of Education (Ed.D.) (see page 112).

Testing Required in Teacher Preparation Programs

Praxis I: Pre-Professional Skills Tests (PPST): Academic Skills Assessments for Prospective Teachers
The Praxis I Pre-Professional Skills Test (PPST) has been implemented by the State of Connecticut to ensure that candidates for teacher preparation are competent in skills (mathematics, reading, and writing) that are considered essential for teacher education candidates. Students who wish to be recommended for certification must either achieve a satisfactory score on each component of the Praxis I PPST or apply and receive a Praxis I waiver.

Praxis I Waiver
The Praxis I waiver may be attained if a student has achieved one of the following: (1) Scholastic Assessment Test (SAT)—(a) administered after April 1, 1995, a cumulative score of 1100, provided that neither the verbal nor the mathematics subtest score is below 450; (b) administered before April 1, 1995, a cumulative score of 1000, provided neither of the subtest scores is below 400; or (2) American College Test (ACT)—(a) administered after October 1989, no less than 22 on the English subtest and 19 on the mathematics subtest; (b) administered before October 1989, no less than 20 on the English subtest and 17 on the mathematics subtest; or (3) Prueba de Aptitud Académica (PAA)—submit proof of cumulative scores equivalent to those stated for the SAT.
A waiver may be granted by furnishing the Connecticut State Department of Education with official proof of having met one of the test score requirements mentioned above. In addition to forwarding appropriate test scores, you must complete a waiver registration form as a waiver applicant. Waiver application forms are available on the Connecticut State Department of Education website.

**Subject Knowledge Assessment: Selected Praxis II (for Prospective Teachers)**

Students are expected to pass at least one exit exam in their specialty area(s) as a condition of teacher certification; they should consult their advisors for details. Students must successfully complete all appropriate course work and student teaching, as well as pass the appropriate Praxis II subject-area or endorsement-area test(s) in order to be considered certification program completers or to be eligible to receive an institutional endorsement for Connecticut state teacher certification.

**Foundations of Reading Test**

As of July 1, 2009, teacher candidates in Connecticut who are applying for an Integrated Early Childhood endorsement (NK–3) or Elementary Education endorsement (K–6) are required to pass the Connecticut Foundations of Reading Test, a test of reading instruction, knowledge, and skills.

**Master’s Degree Programs Leading to Educator Certification**

College graduates who did not, as undergraduates, prepare for public school teaching may engage in professional preparation leading to recommendation for Connecticut teacher certification.

To be eligible for certification endorsement, the candidate must show evidence of balanced study in the liberal arts and have successfully completed the required professional education courses. In addition, all certification candidates must have completed an undergraduate major in a subject area other than education. Candidates with deficiencies in any area may be required to complete additional course work. All official transcripts are reviewed by the advisor and student at the time that the student’s official planned program of study is determined, so that any deficiencies can be noted.

Candidates may have fulfilled some program requirements in past study. Program plans are individually developed in consultation with the student’s advisor and the college evaluator.

Preparation for teaching music may be obtained through The Hartt School in cooperation with the College of Education, Nursing and Health Professions. Programs are planned with advisement of faculty in The Hartt School.

**Recommendation for Educator Certification**

In addition to fulfilling academic requirements, candidates must demonstrate appropriate personal characteristics of the profession. Forms and information may be obtained from the college’s Department of Education and Human Services, Hillier Hall, room 252.

In order to be recommended for certification, the candidate must fulfill State of Connecticut requirements in general education, subject-area major, and professional education courses as outlined in Certification Regulations for Connecticut Educators. Graduate students who are deficient in any of the state requirements must complete those requirements in addition to the professional education courses required for the degree sought.

Students who matriculate into the graduate program must work with their advisor to set up a planned program sheet that lists the required areas of general and professional education. The official planned program sheet is kept in the official files in the Student Services Office, Hillier 216–218. In addition, prior to recommendation for certification, official transcripts are reviewed by the college evaluator to ensure that all certification requirements have been met.

Those seeking teacher certification will have to complete a student teaching experience or experiences. Applications for student teaching are due a full semester prior to assignment. Specific deadlines are posted regularly.

As new State of Connecticut certification regulations are implemented, students are required to meet the new standards.

Applicants for certification who completed any portion of their certification training programs at the University of Hartford who wish to return to the University in order to pursue educator certification may need to take additional courses to satisfy new regulations. Candidates for certification must meet the current educator certification requirements for courses and majors, as well as pass examinations and satisfy standards required for certification upon completion of program courses.
Graduate Admission Requirements

Information about Department of Education and Human Services application procedures may be obtained from the college at 860.768.4598 or from the Center for Graduate and Adult Academic Services at 860.768.4371.

The following application materials must be filed with the Center for Graduate and Adult Academic Services in the Beatrice Fox Auerbach Computer and Administration Center, room 201, for applicants seeking master’s degrees:

1. Official transcripts
2. Two letters of reference from professional or academic sources
3. Completed University of Hartford application for graduate study, and a $45 application fee
4. An essay specifying the area of proposed study, degree sought, and the reasons for seeking admission
5. Interview with appropriate program faculty (Faculty member will complete an interview summary form.)
6. International students seeking acceptance into an education program must have their transcripts assessed by an approved transcript evaluation service. Students also have to pass the TOEFL examination, and the International English Language Testing System (IELTS) exam, and produce a valid Guarantor’s Statement. Approved options may be obtained by calling the Center for Graduate and Adult Academic Services at 860.768.4371.

Those students who wish to apply to the Doctoral Program in Education should refer to page 115 for doctoral program admission requirements.

More detailed information on criteria for admission and necessary evidence is available from the college or from the Center for Graduate and Adult Academic Services.

Planned Programs

A planned program is developed in consultation with the advisor. After matriculation, it is the students’ responsibility to set up a meeting with their advisors in order to plan a program of study. Any subsequent changes in the program must be approved in writing by the advisor and the Department of Education and Human Services chair. A copy of the planned program and any subsequent modifications must be filed by the student in the Collegiate Office of Student Services (Hillyer 216–18) of the College of Education, Nursing and Health Professions.

Nonmatriculated Students

Students may take a maximum of 6 semester hours of graduate study in the College of Education, Nursing and Health Professions before matriculating into a degree program. Additional courses normally are not applied toward completion of a University of Hartford degree.

Financial Assistance

Graduate Assistantships

A limited number of graduate assistantships are available to students who are accepted by the Department of Education and Human Services. Assistantships are designed for students wishing to pursue full-time graduate study. Please inquire in the Department of Education and Human Services.

Comprehensive Examination or Research Project

The comprehensive exam or other specified culminating experience must be taken to complete the master’s degree. Educational technology degree candidates complete an e-portfolio. The comprehensive exam should be taken during the semester in which the last course of the program is taken.

Programs in the Department of Education and Human Services

School Psychology

The School Psychology program is a graduate program in the Psychology department of the College of Arts and Sciences. Further information and application for admission are available from the Center for Graduate and Adult Academic Services.

Teacher Education Programs

The teacher training programs in Early Childhood and Elementary Education provide opportunities for professional preparation in education to meet the rapidly changing needs of a pluralistic society. The goal of these programs is to prepare teachers as reflective practitioners who integrate understanding of their content areas, their students, and theories of pedagogy. Also included in these preparation programs are mastery of learning and developmental theories, knowledge of curriculum and effective teaching
strategies, cultural and diverse needs of students, integration of technology, application of skills in assessment, and implementation and evaluation of effective educational programs.

Upon successful completion of course work, student teaching, and the specified national Praxis II examination(s), candidates are recommended for Connecticut certification in their programs of study.

Successful completion of a comprehensive examination is necessary for all teacher education programs. For further information, see page 101.

As new State of Connecticut certification regulations are implemented, students are required to meet the new standards.

**Early Childhood Education**

**Master of Education (M.Ed.) in Early Childhood Education Leading to Certification (Birth to Kindergarten or Nursery to Grade 3)**

**Required credits: 39 (minimum)**
The Early Childhood Education program is designed to prepare teachers at the graduate level to work in school settings with all children between birth and kindergarten and/or nursery and third grade. The program focuses on an inclusion model, involving every student in a pre-kindergarten and/or kindergarten inclusive setting. Students are prepared to work with families, provide for the integration of children and services, and collaborate with other professionals.

**Professional Education:**
The following requirements constitute the Early Childhood Certification program. Students in this program are required to complete a Professional Foundations core of 18 credits as well as a Nursery/Kindergarten (NK) core of 12 credits of course work plus one NK student teaching experience of 3 credits. Students may undertake an endorsement in the birth to kindergarten area with an additional 6 or 9 credits and/or an endorsement in the Nursery to Grade 3 area with an additional 6 or 9 credits.

**Professional Foundations:**
EDF 568 Philosophical and Cultural Issues [3]
EDH 510 Theoretical Foundations: Children and Adults with Special Needs [3]
EDR 544 Foundations and Strategic Actions of Literacy Learning [3]
EDR 550 Fundamentals of Reading Instruction [3]
EDP 540 Developmental and Learning Theories [3]
EDT 610 The Computer as an Instructional Tool [3]

**Nursery/Kindergarten Core:**
EDY 630 Model Programs in Early Childhood Education [3]
EDY 647 Working with Families: The Child, the Home, and Community [3]
EDY 646 Observation and Assessment in Early Childhood [3]
EDY 644 Birth–K Integrated Curriculum [3]
EDY 554 Student Teaching—NK [3] Birth–Kindergarten Courses:
EDY 643 Infants and Toddlers: Development and Assessment [3]
EDY 552 Student Teaching—Infant/Toddler [3 or 6]

**Nursery–Grade 3 Courses:**
EDY 645 K–3 Integrated Curriculum [3]
EDY 553 Student Teaching—Grades 1, 2, 3 [3 or 6]

**Note:** Also required for certification if not taken at the undergraduate level: EDR 558 Reading and Language Arts through Children’s Literature (3 credits) and 15 credits in Human Growth and Development.* The 15 credits in Human Growth and Development may be taken from prior study or may be taken concurrently with the required Early Childhood Education program.

**Master of Education (M.Ed.) in Early Childhood Education**

**Required credits [30]**

**Required Core:**
EDT 610 The Computer as an Instructional Tool [3]
EDM 554 Research and Statistics in Education and Human Services [3]

**Specialization Core:**
EDY 630 Programs in Early Childhood Education [3]
EDY 620 Planning and Administering Early Childhood Programs [3]
EDY 640 Theory and Research in Early Childhood Education [3]
Electives [12]

*Questions regarding specific courses taken at the undergraduate level can be answered by an advisor.
Master of Education (M.Ed.)
in Early Childhood Education
with Montessori Concentration

Required credits [33]

Required Core:
EDY 620 Planning and Administering
ECE Programs [3]
EDY 630 Model Programs in ECE [3]
EDY 640 Theory and Research in Early
Childhood [3]
EDY 644 B–K Integrated Curriculum [3]
EDY 646 Observation and Assessment in
Early Childhood [3]
EDY 647 Working with Families: The Child,
the Home, and Community [3]

Montessori Core:
EDYM 500 Foundations of the Montessori
Method [3]
EDYM 510 Human Relations and
Self-Awareness among Young Children [3]
EDYM 520 Perceptual-Motor Development [3]
EDYM 530 Language Arts/Reading
Curriculum and Instruction [3]
EDYM 540 Practicum [3]

Total credits for Montessori core: 15

Total credits for degree program: 33

The Montessori Training Center of New
England is responsible for the field placements
of students. These placements are made in AMI-
accredited Montessori schools in Connecticut
and Massachusetts.

Admission Requirements
1. Minimum of bachelor's degree
2. Acceptance into the Montessori Training
   Center of New England
3. Official transcripts
4. Two letters of reference from professional
   or academic sources
5. Completed University of Hartford
   application for graduate study
6. An essay specifying the reasons for
   seeking admission in this area of study
7. An interview with appropriate program
   faculty (Faculty member will complete
   an interview summary form.)

The objectives of this concentration in Montes-
sori Primary Education within the Early Child-
hood Education graduate program are as follows:

1. To expose the Montessori-prepared early
   childhood educator to various current and
   historical approaches to early childhood edu-
   cation;
2. To prepare Montessori-prepared early child-
   hood educators to work with families;
3. To prepare Montessori-prepared early child-
   hood educators to use a variety of current de-
   velopmentally appropriate assessments and
   to plan appropriately for children based on
   those assessments;
4. To prepare Montessori-prepared early child-
   hood educators to read current early child-
   hood research as consumers of research as
   applied to children and families; and
5. To prepare Montessori-prepared early child-
   hood educators to plan and administer early
   childhood programs.

This program creates the opportunity for
graduate-level preparation with a concentration
in the primary level of Montessori education.
This program is established through a partner-
ship with the Association Montessori Interna-
tionale (AMI)–approved Montessori Training
Center of New England. Prepared Montessori
teachers interested in pursuing a graduate degree
in early childhood education may take courses
in early childhood education in addition to the
courses undertaken for the Montessori prepara-
tion. This program concentration is part of the
early childhood graduate offerings in the De-
partment of Education and Human Services.

The Montessori Concentration is not a certifi-
cation program.

The Montessori concentration prepares pro-
essionals to address the changing needs of stu-
dents in Montessori schools who may not have
begun their education in a Montessori school.
The concentration in Montessori recognizes the
professional preparation of the Montessori-
trained teacher and builds on that to provide the
Montessori teacher with a well-rounded back-
ground in all areas of early childhood education.

Courses and practical experiences listed in
the Montessori concentration, plus the other ear-
ly childhood courses, lead to a master’s
degree in early childhood education. The 33-
credit program of study requires two semesters
to complete the 15-credit Montessori portion of
the program. The remaining early childhood
courses are taken as available through a regular
course rotation.
Field-Based Learning and Practicum
Through the integration of Montessori field study in course work as well as in the practicum (EDYM 540), candidates have opportunities to apply material from class to children in real teaching and learning settings. Candidates thus bring back authentic experiential information to their training experiences, which enriches graduate students’ learning.

Field experiences through the non-Montessori courses round out the Montessori experience, affording students the opportunity to observe and interact in programs and schools that follow various models of early childhood education.

Culminating Activity
As a culminating activity for the graduate degree, students are required to take the comprehensive exam that is part of the graduate program in early childhood education. The culminating activity for the concentration in Montessori consists of a series of oral exams.

Master of Education (M.Ed.) in Elementary Education Leading to Certification (Kindergarten–Grade 6)
The Master of Education in Elementary Education program prepares graduate students to teach all academic subjects of elementary school. Experience with children in the classroom is essential to the preparation of excellent teachers, and is stressed.

To be eligible for endorsement for certification from the university, candidates must show evidence of balanced study in the liberal arts, that they have passed the state general education requirements for teachers, and that they have successfully completed the required professional education courses listed below. In addition, all certification candidates must have completed an undergraduate major in a subject area other than education. They must pass all examinations required by Connecticut in their endorsement area, and be successful in their student teaching experience.

Required credits [ 45]
Required Core:
EDF 568 Philosophical and Cultural Issues in Contemporary Education [3]
EDH 510 Theoretical Foundations: Children and Adults with Special Needs [3]
EDP 540 Applied Developmental and Learning Theories [3]
EDR 550 Fundamentals of Reading Instruction [3]
EDT 610 The Computer as an Instructional Tool [3]
EDE 654 Models of Instruction: Elementary [3]
EDR 544 Foundations and Strategic Actions of Literacy Learning [3]
EDE 551 Reading and Language Arts Instruction [3]

Upper-Level Courses:
EDE 660 Curriculum and Standardized Assessment [3]
EDE 662 Planning and Assessing: Elementary [3]
EDE 663 Elementary Methods: Science/Social Studies/Arts [3]
EDE 664 Math Methods [3]
EDE 667 Student Teaching and Seminar: Elementary [9]

Master of Education in Educational Technology
The Master of Education in Educational Technology program is designed to develop education professionals to be able to use existing and emerging technologies to enhance student learning.

Based on educational theory and design, these educational leaders will employ reflective practice to integrate and implement educational technologies into their courses and curriculum. These technology-rich environments will support individual and collaborative learners in K–12 schools as well as higher education and adult learning settings. The Educational Technology program is aligned with the Association for Educational Communications and Technology (AECT), and with the National Council for Accreditation of Teacher Education (NCATE) technology standards, and State of Connecticut technology standards.

A grade point average of 3.0 is required for graduation. Students may receive a grade of no lower than C in one course. Students who receive a grade below B in two courses are not allowed to continue in the program.

The educational technology course of study provides education professionals with the foundation, knowledge base, experience in practice, and expertise to become leaders in the planning and implementation of existing and emerging technologies. Courses covering such topics as multimedia, graphics, the Internet, and others not only enhance education professionals’ understanding of modern educational technologies
but also provide a basis for pedagogical improvements in their various educational environments. Courses are designed to emphasize project-based learning and application of skills and theory to improve their practice.

Programs are individualized for each student based on the courses listed below.

**Required credits [30]**

*General Core [6]:*
- EDT 610 The Computer as an Instructional Tool [3]
- EDM 554 Research and Statistics in Education and Human Services [3]

*Specialized Core [12]:*
- EDT 615 Educational Technology: Creating New Environments for Learning [3]
- EDT 618 What an Educational Technology Specialist Needs to Know [3]
- EDT 665 Theoretical Foundations of Educational Technology [3]
- EDT 666 Instructional Design [3]

*Specialized Options:*
- EDT 616 Microcomputer Hardware: What an Educator Needs to Know [3]
- EDT 617 Programming Concepts for Teachers [3]
- EDT 620 Using the Internet across the Curriculum [3]
- EDT 625 Multimedia and Curriculum Innovation [3]
- EDT 631 Using Technology in Intermediate and Middle Grades [3]
- EDT 635 Learning about Distance Education [3]
- EDT 640 Evaluation and Design of Educational Software [3]
- EDT 650 Directed Study in Educational Technology [3]
- EDT 660 Current Issues in Educational Technology [3]
- EDT 663 K–8 Science and Technology in the Classroom [3]
- EDT 664 Mathematics and Technology in Grades 3–8 [3]
- EDT 667 Publishing and Managing Websites [3]
- EDT 670 Technology and Educational Reform [6]
- EDT 696 Current Topics and Applications [1–3]

**Electives:**

Chosen with the advisor’s approval from other graduate offerings in the college or the University.

**Course Codes**

The course numbering system is described on page 40.

Not all of the courses listed in this *Bulletin* are offered each year. Offerings for each semester and for the summer sessions are listed in the class schedules that are available during each registration period in the Office of the Dean. The University reserves the right to make changes in academic programs.

Course codes are listed in alphabetical order as follows:

- EDE Elementary Education
- EDF Educational Foundations
- EDH Special Education
- EDM Research
- EDP School Psychology and Human Development
- EDR Reading
- EDT Technology
- EDX Independent Study
- EDY Early Childhood Education
- DYM Early Childhood Montessori Education

**Course Descriptions**

**Elementary Education**

**EDE 654 Models of Instruction: Elementary**

Diverse models of instruction will be explored in order to provide a beginning repertoire of teaching skills and strategies for the elementary level. Models include presentation, direct instruction, concept teaching, cooperative learning, problem-based instruction, and classroom discussion. An understanding of the dynamics of teaching and the techniques of matching teaching models to particular student outcomes within a reflective practitioner philosophy will be emphasized. An overview of the “backward design” model, highlighting essential questions for optimizing student understanding, will be reviewed. Application will be made to the development of a content-area unit plan employing the varied models of instruction designed to meet the needs of all students. Prerequisites (select two): EDF 568, EDH 510, and EDP 540.
EDE 660 Curriculum and Standardized Testing [3] This course incorporates elementary curricular content within a foundation for standardized testing and is linked to field-based assignments. Standardized testing continues to play a major role as an indicator of achievement of all students in American education. Students will learn and reflect on how mandated state (i.e., Connecticut Mastery Testing) and national tests impact their classrooms, and how best practices in curriculum and instruction prepare all children for standardized testing. Refining intended curricular learning outcomes and the sequencing/integration of curriculum will be addressed. Measurement skills and appropriate computer software, including reliability, validity, as well as statistical tools necessary for interpretation of results, will be emphasized. Diversity and cultural sensitivity issues will also be explored. Prerequisite: EDE 654.

EDE 662 Planning/Assessing: Elementary [3] This course will combine the rudiments of teacher curricular and class management planning (objective writing, lesson plans, unit plans) using state and national curricular frameworks for all content areas. This curricular planning will be paired with ongoing and continuous assessment techniques. The focus will be on thematic curriculum planning using interdisciplinary content areas. Students will learn how to employ and reflect on authentic assessment mechanisms to increase all student achievement. Students will be given opportunities to develop curriculum units and conduct observations in combination with documentation methodologies and assessment strategies that will include portfolios and teacher-made assessments. The intended outcome of this course is that participants will have an introductory understanding of the natural connections between teaching, learning, documentation, assessment, and reflective practice that is linked to EDE 665 Practicum and Seminar. Prerequisite: EDE 660. Corequisite: EDE 665.

EDE 663 Elementary Methods: Science/Social Studies/Arts [3] This course combines content-specific, discipline-based methodology for science, social studies, and the arts at the elementary level with an interdisciplinary/integrative framework. State and national curricular benchmarks will be reviewed in each of the three domains for the lower- and upper-elementary school levels. Specific materials, resources, and technological supports will be examined per discipline, along with the particulars of planning, assessment, and management techniques for all students. Within the context of overarching essential questions, cross-curricular applications will be made through unit planning that incorporates all three of the domains. It is a main goal of this course that students will internalize the connections between subjects and will understand and reflect on the richness of this interaction. It is also intended to serve as a model for similar integration across other areas of the elementary curriculum. Prerequisite: EDE 662.

EDE 664 Elementary Math Methods [3] This course provides students with an overview of various methodologies and materials (manipulatives and computer based) specifically used for effective mathematics teaching at the elementary school level. Students will become knowledgeable in selecting appropriate methods for assessing all elementary students in this discipline as well as assessing curricular effectiveness. The National Council of Teachers of Mathematics standards along with Connecticut’s Curricular Framework for Mathematics will be fully reviewed. Students will explore and reflect on the variety in learning styles found on the elementary level and will be responsive to typical problematic patterns such as “math phobia.” Participants will also be able to analyze their own experiences, perceptions, and attitudes about math and, as reflective practitioners, will become aware of how these factors impact young learners. Prerequisite: EDE 663.

EDE 667 Student Teaching and Seminar: Elementary Education [9] This course provides student teachers with an opportunity to integrate their understanding and knowledge of students, content, and pedagogy in an elementary classroom. All placements are in approved settings (urban, suburban, or rural) and require full-day attendance five days per week. This is the culminating preservice supervised teaching experience that promotes being a reflective practitioner. Students work very closely with both their University supervising instructor as well as their on-site cooperating teacher. Feedback from both supervisors will be ongoing and continuous and will provide the student with a supportive framework upon which modifications and experimentation for all students can be employed. Prerequisite: EDE 665. Laboratory fee.

Foundations of Education
EDF 568 Philosphic and Cultural Issues in Contemporary Education [3] Study of persistent themes in American education, interpreted historically and philosophically, including con-
cepts of the educated person; the school as an extension of business, science, and the arts; selected problems of current interest.

EDG 611 Multicultural Approaches in Education and Human Services [3] Teachers, administrators, counselors, and health and human services professionals are increasingly called upon to respond to diversity issues and cultural differences in the populations they serve. The intent of this course is to increase knowledge, understanding, and sensitivity to ethnic and cultural groups and subgroups within the dominant American culture. Major focus is on the practice of effective and sensitive techniques. Prerequisite: Graduate standing.

Special Education
EDH 510 Theoretical Foundations: Children and Adults with Special Needs [3] An introductory graduate course in which the classroom teacher will be exposed to a wide variety of exceptionalities in the population in order to study the cognitive, language, and social functioning of each exceptional population, with emphasis on the implications of these variables for home, school, and community.

Assessment, Research, and Learning
EDM 554 Research and Statistics in Education and Human Services [3] Intended to provide skill in treatment of research data. Includes descriptive, correlational, and inferential statistics up to two-way ANOVA; some nonparametric statistics.

Psychology and Human Development
EDP 510 Emotional Intelligence and Executive Function Strategies [3] This course provides proactive strategies for training others in executive functioning (self-management) and emotional intelligence (self-awareness and relationship management). Educators, counselors, and human service professionals learn strategies to assist their students or clients and themselves in building lifelong skills.

EDP 540 Applied Developmental and Learning Theories [3] The major theories of human development and learning will be emphasized through research, readings, discussion, and projects for educational and human service applications. It is intended that students will develop an understanding of and learn applications for the theories of behavioristic, social learning, cognitive, and maturational theorists.

Reading
EDR 544 Foundations and Strategic Actions of Literacy Learning [3] This course addresses the relationship between oral and written language and its connection to literacy learning and proficient reading. Learning outcomes pertaining to phonemic awareness, phonics knowledge, reading comprehension, and assessing reading are emphasized. The sequencing of reading curricula and integration of reading instruction, including response to intervention within the elementary curriculum are also a focus. Students are prepared to apply their knowledge of the reading processes and of instructional and assessment practices to students in their student teaching experiences, where they are expected to demonstrate competency of this knowledge. Prerequisite: EDR 550.

EDR 550 Fundamentals of Reading Instruction [3] This is a graduate-level course designed to introduce the developing teacher to reading instruction and the development of a reading/writing community. This course will emphasize the theory and components of the reading process that will help teachers develop a set of clear principles and strategies for literacy instruction. Semantic, syntactic, graphophonetic, and pragmatic sources of information will be explored. The latest research about literacy development and its relationship to classroom instruction for all learners will be reviewed. Approaches to teaching low-English-proficient and at-risk students will be integrated throughout the course. This course is designed for students who have had no previous course work in the area of reading.

EDR 551 Reading and Language Arts Instruction [3] This course will develop competencies in assessment and instructional techniques in reading and language arts instruction (reading, writing, speaking, spelling, listening, viewing, grammar, and thinking). The future teacher will further develop proficiency in supporting diverse learners as they develop language and literacy attitudes and skills. Students will learn how to engage learners in literature study and writing workshop to foster efficiently and effectively hyperawareness for strategy application. The interrelated process of reading, writing, listening, speaking, viewing, and performing with a wide range of learners will be stressed. State (Connecticut’s Blueprint for Reading Achievement: The Report of the Early Reading Success Panel) and national reading
guidelines will be used to develop a comprehensive reading and language arts program.

**EDR 558 Reading and Language Arts through Children’s Literature** [3] This course is the second literacy learning course for early childhood majors. It focuses on effective, research-based ways of helping and supporting young children to develop as readers, writers, speakers, listeners, and thinkers. Students will learn how to develop and teach in a comprehensive literacy learning program that encourages thoughtful, critical, and extensive reading and writing. Students will explore children’s literature in order to foster lifelong literacy in young children. Prerequisite: EDR 344 or EDR 550.

**Educational Technology**

**EDT 610 The Computer as an Instructional Tool** [3] Introduction to the use of the computer in the teaching-learning process. Topics will include the use of the computer as a tool and tutor. Students will become competent users of a wide range of educational computer software and will examine the issues and implications of computer use in classrooms. Laboratory fee.

**EDT 615 Educational Technology: Creating New Environments for Learning** [3] This course is intended to enable students to explore the uses of technology to make needed changes in school learning. Bottom-up curriculum planning, cooperative learning, collaborative team planning, whole learning and situated (contextual) learning approaches will be investigated in relation to trends and potentials in the field of educational technology. Prerequisite: EDT 610. Laboratory fee.

**EDT 616 Microcomputer Hardware: What an Educator Needs to Know** [3] An in-depth exploration of the computer environments commonly found in elementary and secondary schools. Students will gain experience with the operating systems and hardware for Windows, Macintosh, and MS DOS. The course will include consideration of networking, adaptive and multimedia peripherals, basic operation, and troubleshooting. Recommended for all educators using computers. Prerequisite: EDT 610 or permission of instructor. Laboratory fee.

**EDT 617 Programming Concepts for Teachers** [3] Introduction to the major concepts in computer programming and their application in the languages of Turtle Graphics, JAVA, JAVA applets, and HTML. Special emphasis is placed on learning an algorithmic approach to problem solving and then creating programming code for the solution. This course is for beginners who have no experience with programming or novices with limited experience. Prerequisite: EDT 610. Laboratory fee.

**EDT 618 What an Educational Technology Specialist Needs to Know** [3] This course focuses on topics that include networking issues, server administration, staff training and support, allocation of resources to students and teachers, curriculum issues, and current technical, instructional, and administrative issues that affect educational computing in K–12 schools and organizations. Prerequisite: EDT 610.

**EDT 620 Using the Internet across the Curriculum** [3] This course provides an in-depth experience with the educational resources of the Internet. Using hands-on activities, students develop expertise in integrating, managing, and developing strategies for using the Internet in the curriculum. They learn to adapt Internet tools effectively to present curricular topics, establish criteria for evaluating and authenticating resources of the Internet, and develop ways to contribute to the educational resources on the Internet. Prerequisite: EDT 610. Laboratory fee.

**EDT 625 Multimedia and Curriculum Innovation** [3] This course is designed to enable students to explore a variety of potential uses of multimedia technology for the development of interactive learning environments. The focus of the course will be on the use of videodisc and CD-ROM technology controlled with a Hypercard front end to create dynamic classroom activities for elementary and secondary students. Prerequisite: EDT 610. Laboratory fee.

**EDT 631 Using Technology in Intermediate Grades** [3] This course provides teachers with the opportunity to explore the use of technology in grades 4–8 in social studies, science, math, and language arts. Students will examine and evaluate various software programs and create a dynamic project based on their own district standards. Prerequisite: EDT 610. Laboratory fee.

**EDT 635 Learning about Distance Education** [3] This survey course covers different aspects of telecommunications, teleconferencing, video, computers, multimedia, the World Wide Web, and other technologies related to distance education. Students and professor explore research concerning the best methods of using distance education and some principles of implementing distance education within K–12 and higher education, business, and government institutions. Cutting-edge technologies that contribute
to this ever expanding field of education are discussed, as is their relationship to the different forms of synchronous and asynchronous distance learning and distance education using computer technology. Prerequisite: EDT 610. Laboratory fee.

EDT 637 Graphics and Visual Representation [3] This course focuses on learning how to use graphics and design techniques with a variety of graphical programs to help students visualize concepts, organize, and communicate ideas and enhance their abilities to think hierarchically and graphically. Prerequisite: EDT 610. Laboratory fee.

EDT 650 Directed Study in Educational Computing I [3] Students develop projects to be completed on an individual basis under the direction of a faculty member. Laboratory fee.

EDT 660 Current Issues in Educational Technology [3] This course probes selected topics in educational technology that reflect emerging trends in the field. Discussion centers on the impact of educational technology issues on individual teachers and their pedagogy, lesson planning and instructional design, and administrative and budgetary issues at the school and school district level. Prerequisite: EDT 610. Laboratory fee.

EDT 663 K–8 Science and Technology in the Classroom [3] This course is designed to teach an integrated approach to the teaching of elementary and middle school science and the use of technology in the classroom. Students use and demonstrate hands-on, inquiry-based science activities with microcomputer software, graphing calculators, and calculator-based labs, and use the Internet via electronic mail and the World Wide Web. Prerequisite: EDT 610 or the equivalent. Laboratory fee.

EDT 664 Mathematics and Technology in Grades 3–8 [3] Students learn how to integrate technology in the mathematics curriculum of grades 3–8, using the NCTM Standards as a guide. Students are introduced to a variety of software that is appropriate for intermediate and middle school students and learn to use these materials to stimulate mathematical understanding. Prerequisite: EDT 610 or equivalent. Laboratory fee.

EDT 665 Theoretical Foundations of Educational Technology [3] This course provides students with a theoretical framework for innovative applications of technology to enhance learning. The course focuses on learning theories in relation to educational technology and the use of this information in planning models for educational change. Prerequisite: EDT 610. Laboratory fee.

EDT 666 Instructional Design [3] This is a survey course of the field of instructional design. Participants learn fundamental instructional design concepts and processes. They explore a range of instructional design theories and consider their relationship to learning theories. A number of instructional design models are examined, covering the period from the early 1900s to present-day Web-based course instructional design. Topics include, but are not limited to, Instructional Systems Design (ISD), rapid prototyping, needs analysis, learner characteristics, instructional strategies, and formative and summative evaluations. Prerequisites: EDT 610 and EDT 665. Laboratory fee.

EDT 667 Creating, Publishing, and Managing Websites [3] Students learn about the process of website development and publishing, and to master basic Web-design tools and techniques. Students learn to analyze the issues involved in implementing advanced Web components and technologies, using a variety of advanced tools, technologies, and software. Students critically evaluate Web content, design, and implementation strategies, and become acquainted with advanced forms of Web-based presentation and Web-based data management and communications. They learn to customize Web content for their own classroom or school environment. Prerequisite: EDT 610. Laboratory fee.

EDT 670 Technology and Educational Reform [3] This course explores ways to use technology to bring about significant change in the educational process. Basic issues to be reviewed are those that have led to the need for innovation in education, the process of implementing technology in education, changes in student attitudes and needs, changes in the worldview, and changes in the purposes and meaning of “education.” Concrete examples are explored of how technology can assist in enhancing the learning process for both teachers and students. Prerequisite: EDT 610. Laboratory fee.

EDT 696 Educational Technology: Current Topics and Applications [1–3] Selected topics in educational computing and technology, varying from semester to semester, reflecting emerging trends in the field. Prerequisite: EDT 610 or equivalent. Laboratory fee.
Early Childhood Education

EDY 553 Student Teaching: Grades 1, 2, 3 [3–6] Provides a supervised experience in a selected inclusion model, grade 1, 2, or 3 setting. The student will develop competencies in observing/assessing children; planning, implementing, adapting, and evaluating materials and instructional programs for children of these ages. Prerequisite: Permission of the department. Laboratory fee.

EDY 554 Student Teaching: Nursery–Kindergarten [3] A supervised experience in a selected inclusion model, preschool or kindergarten setting. The student will develop competencies in observing/assessing children; planning, implementing, adapting, and evaluating materials and instructional programs for children of these grades. Prerequisite: Permission of the department. Laboratory fee.

EDY 620 Planning and Administering Early Childhood Programs [3] Examines theory and practice in the administration of educational programs for young children. Focus on determining program philosophy and operating policies; planning, implementing, and evaluating programs; complying with government regulations; selecting and working with staff; planning and analyzing a budget.

EDY 630 Model Programs in Early Childhood Education [3] This course will focus on the study and evaluation of model early childhood approaches developed to serve infants through primary grade children. Emphasis is on the integration of major concepts into workable models.


EDY 643 Infants and Toddlers: Development and Assessment [3] This course will explore all areas of development (physical, language, cognitive, and social/emotional) for both normal and atypical infants and toddlers. Formal and informal assessment tools will be studied, which take into account developmental milestones and developmental lags. This course will include curriculum and play appropriate for the stimulation of development in typical and atypical infants and toddlers. Observations and direct work with this age span will be required. Prerequisite: Permission of advisor.

EDY 644 Birth–Kindergarten Integrated Curriculum [3] This course is designed to explore the components of early childhood curricula (language arts, mathematics, science, social studies, expressive arts, health, and safety) for birth to kindergarten through the study and creation of developmentally appropriate and culturally sensitive curricula for young children. Prerequisite: Permission of advisor.

EDY 645 Kindergarten–3 Integrated Curriculum [3] This course is designed to explore the components of early childhood curricula (language arts, mathematics, science, social studies, expressive arts, health, and safety) for kindergarten to third grade through the study and creation of developmentally appropriate and culturally sensitive curricula for young children. Prerequisite: Permission of advisor.

EDY 646 Observation and Assessment in Early Childhood [3] Observation is the core of the assessment of children during the early childhood period. The student will learn a variety of observation techniques to incorporate as a key variable into early childhood programs, birth to grade 3. Methods of assessment, both formal and informal, will be explored. The rationale for and ethical issues surrounding assessment will be discussed. Prerequisite: Permission of advisor.

EDY 647 Working with Families: The Child, the Home, and Community [3] In this course students explore the vital role of family with regard to children in the home and in the community. The course details the role of the early childhood professional working with both the child and the family. The vast range of community services available to families and children is explored. Approaches to working toward the implementation of the best possible service delivery for the child and family are emphasized. Prerequisite: Permission of advisor.
Early Childhood Montessori Education

EDYM 500 Fundamentals of Montessori Method [3] This course presents a survey of the development of the young child in accordance with the psychology of Dr. Maria Montessori and the philosophy of the Montessori method. Prerequisite: Acceptance into the MTCNE program.

EDYM 510 Montessori Developmental and Social Skills [3] This course shows, by demonstration and lecture, a group of exercises known in Montessori education as the Practical Life exercises. These exercises are designed to enable independent functioning, social grace, and self-esteem among children between ages 3 and 6-plus years. Content includes development of coordinated movement; health and safety, both indoors and outdoors; and play (spontaneous, free choice of activities). Prerequisite: Acceptance into the MTCNE program.

EDYM 520 Perceptual Motor Development [3] This course shows, by demonstration and lecture, activities known in Montessori education as Exercises for the Education of the Senses that are designed to lead the child to an intelligent and imaginative exploration of the world. Content includes identification of a child’s process of classifying her/his world, problem solving, and critical thinking. Prerequisite: Acceptance into the MTCNE program.

EDYM 530 Montessori Language Arts Reading Curriculum [3] This course shows, by demonstration and lecture, the Montessori exercises for the development of spoken and written language, reading readiness, and prereading and reading skills. Emphasis is on spoken and written language in the areas of daily life, storytelling and composition, literature, geography, history, biology, science, music, and art, as well as the functional aspects of grammar, syntax, reading, and reading analysis. Additional emphasis is on building self-confidence and self-expression in the social setting. Prerequisites: EDYM 500, 510, and 520.

EDYM 540 Montessori Practicum [3] This course offers an opportunity to practice the various professional and personal skills that a Montessori teacher uses. By working along with a qualified Montessori teacher in a children’s group, the student may focus on one professional task at a time. Student-teachers may discern which facets of their personalities are appealing to young children and which are antagonistic to this stage of development. This practicum is an eight-week, full-time, supervised classroom experience in an accredited Montessori school. Prerequisites: EDYM 500, 510, and 520. Corequisite: EDYM 530.

Special Courses and Independent Study

EDX 613 Independent Study [1–3] Independent study that may include research, experiments, or special work in one’s own school or classroom. Arrangements may be made with and projects approved by the major professor concerned.

EDX 650 Thesis [3] The continued investigation and reporting of a suitable problem in the field of education. The student is expected to enroll in each semester until the thesis is finally accepted by the chair of the department. Student and advisor must agree on the thesis problem.

EDX 663 Special Topics in Education [1–6] Exploration of contemporary topics in education. Areas considered may include school effectiveness, teaching/learning styles, and video teaching. Consult current schedule for topics.
Department of Educational Leadership

Faculty
Professor Donn Weinholdt, Ph.D. (Department Chair)
Associate Professors Karen I. Case, Ph.D.; Barbara A. Intriligator, Ed.D.
Assistant Professor Diana J. LaRocco, Ed.D.

The Department of Educational Leadership offers a Doctor of Education degree (Ed.D.). Students come from a variety of professional disciplines and work settings, including higher education, nursing, public and private K–12 schools, state government, and nonprofit agencies.

Admission Requirements

Information about the Educational Leadership programs may be obtained through the University’s Center for Graduate and Adult Academic Services in the Beatrice Fox Auerbach Computer and Administration Center, room 201.

Admission to the Educational Leadership programs is a two-phase process. Applicants must hold a completed master’s degree in a related field and have at least three years of professional experience.

Applicants must successfully fulfill the requirements of phase I before advancing to phase II.

Phase I
To complete the initial phase of the application, the applicant must submit the following credentials:

- Application form
- Writing samples (form enclosed in application)
- Current résumé
- Application fee
- Official transcripts
- Official transcripts
- Letter of support from employer
- Three references from professors, employers, or school administrators on the forms supplied with the application

Phase II
Once applicants have successfully completed phase I, they will receive notification requesting that they schedule an interview with the Educational Leadership Admissions Committee. The admissions interview is the last step in the application process. Successful applicants must

(1) demonstrate competence to complete scholarly work, (2) demonstrate skills and/or aptitude for leadership in educational and human service organizations, and (3) demonstrate competency in written expression and in articulating complex ideas verbally.

Doctoral Program in Education

Program Description

The University of Hartford’s Doctoral Program in Education (Ed.D.) reflects the latest thinking and research on leadership, organizations, and institutional change. Participants benefit from the rich interactions of our diverse student body, drawn from public and private schools, universities, health-related professions, government and human service organizations. What these individuals have in common is a dedication to the improvement of possibilities for their respective constituencies through change and enhancement of their service delivery systems.

The Department of Educational Leadership takes pride in the following mission statement: To create a learning environment through which learners build on their knowledge and skills in ways that enable them to shape their work settings into dynamic learning environments, creating schools, organizations, and communities wherein energies are devoted toward excellent achievement and outcomes.

A variety of experiences have been infused into the doctoral program of study, enabling students to acquire cognitive understanding and to strengthen their personal leadership skills. Students who successfully complete this program are awarded a Doctor of Education, with a specialization in educational leadership.

Special Features

Diversity of Students. Most students are mid-career adults, who balance family and professional responsibilities with their pursuit of the doctoral degree. They work in schools, colleges, universities, and in health care, government, and human service organizations. Thus, the educational leadership learning community benefits from interdisciplinary problem solving as we address the complex issues confronting educational leaders today.

Cohort Group Structure. Students are admitted in cohort groups each summer. These groups serve as a support network as students advance through the program. To the extent possible, courses are scheduled to enable students to complete their programs together with colleagues. Active enrollment in summer courses
allows students to move through courses rapidly and replaces the residency requirement in more traditional doctoral programs. Also, students have ongoing formal and informal opportunities to integrate and exchange ideas with colleagues, faculty, and other members of the University community.

**Doctoral Advisement Process.** Upon matriculation into the doctoral program, each student is assigned a program advisor. Program advisors meet with students regularly as a demonstration of the doctoral program’s commitment to matriculated students. In addition, faculty assist students with the development of their programs of study and develop mentoring relationships with students.

**Information Technology.** The doctoral program includes training and support in electronic information technology. Students use Blackboard and the University online support system to enhance their classroom experiences. The Mortensen Library website offers a wealth of tools for conducting research on the Internet.

Also, students learn to use computer applications to enhance their work, including spreadsheet, database, and presentation software. The goal of this component of the program is to produce leaders who are familiar with the tools of information technology and who are prepared to use them in instructional and administrative settings.

**Advancement to Candidacy**
In order for students to be eligible to conduct dissertation research, they must (1) have maintained a 3.5 GPA, (2) have no incomplete grades, and (3) have successfully completed the advancement to candidacy requirements. These requirements include successful completion of EDD 860 and full faculty approval of the candidate’s EDD 860 Chapter One assignment. Official advancement to candidacy entitles the student to formally engage in the dissertation research process, the final stage in the doctoral program.

**Dissertation**
Every student must complete a dissertation as part of the graduation requirements. Policies and procedures for completing the research are available under separate cover.

Students must maintain continuous enrollment from the initial date of matriculation through completion of the dissertation.

**Learning Sequence**

**Professional Studies (24 credits)**
These courses represent the core learning in the program. They address the major understandings and skills needed by educational leaders in the areas of educational policy, curriculum and instruction, organizational performance and change, and professional and ethical practice. Collectively, these areas represent the domains within which educational leaders practice. All courses are required.

**Courses in this area include**
- EDD 820 Community-Based Research [3]
- EDD 821 Educational Policy Studies [3]
- EDD 822 Seminar in Organizational Theory [3]
- EDD 823 Educational Organizational Improvement and Change [3]
- EDD 824 Curriculum Theory and Research [3]
- EDD 825 Seminar in Instructional Development [3]
- EDD 826 Professional and Ethical Issues in Educational Leadership [3]
- EDD 827 Seminar in Educational Leadership [3]

**Specialization Courses (9 credits minimum)**
Courses in this program area address the major challenges confronting educational leaders charged with the responsibility of sustaining institutions through the promotion of innovative practices. Such leaders engage in systems thinking, understand both practical and policy issues associated with resource management, as well as develop and sustain professional learning communities. These leaders explore the viability of coordinated service delivery approaches for persons with complex service needs and their families. They encourage new paradigms for engagement with the community. Gender equity and diversity issues also guide their practice.

**Courses in this area include**
- EDD 830 Advanced Planning [3]
- EDD 831 Empowerment of Professional Staff [3]
- EDD 832 Human and Fiscal Resource Management [3]
- EDD 833 Integrating Services for Children and Families [3]
- EDD 834 Higher Education Foundations [3]
- EDD 835 Higher Education Law [3]
- EDD 839 Special Topics in Educational Leadership [3]
Research Methods (9 credits)
Students acquire those quantitative and qualitative research skills and methodologies needed to engage in their doctoral research. All courses are required.

Courses in this area include
EDD 840 Research Skills for Educational Leaders [3]
EDD 842 Qualitative Research Methods [3]
EDD 844 Quantitative Research Methods [3]

Synthesis Activities (9–12 credits)
Students are required to complete at least one internship. Many choose a research internship in which they produce a scholarly presentation or publication. Others opt for an administrative internship in an educational organization setting.

All students are required to complete the Synthesis Seminar in which they develop a substantial review of the literature related to a specific research problem. They are also required to compete the Dissertation Proposal Seminar. The comprehensive introduction to a research project developed in this class is used to assess students’ readings for the final dissertation phase.

Courses in this area include
EDD 850 Doctoral Internship—One [3]
EDD 851 Doctoral Internship—Two [3]
EDD 852 Synthesis Seminar [3]
EDD 860 Dissertation Proposal Seminar [3]

Dissertation (12-credit minimum)
Courses in this area include
EDD 861 Doctoral Dissertation—One [3–6]
EDD 862 Doctoral Dissertation—Two [3–6]
EDD 863 Doctoral Dissertation—Three [1–6]

Course Descriptions

EDD 820 Community-Based Research [3]
Theory, research, and models of effective practice and implementation inform the educational leader’s role as change agent, and boundary spanner between educational organizations and community members. This role includes being involved in building reciprocal relationships, facilitating understanding and communication within and between various interest groups, and developing mutually beneficial linkages and partnerships to enact positive adaptive change through jointly conducted inquiry. Prerequisite: Matriculation in Ed.D. program.

EDD 821 Educational Policy Studies [3] Examines the theoretical origins of policy studies in education: different conceptualization of the policy process, the strengths and weaknesses of common methods and tools used in various phases of the policy process, the role and function of actors in various phases of the policy process, and the ethical dimensions of policy analysis. Prerequisite: Matriculation in Ed.D. program.

EDD 822 Seminar in Organizational Theory in Education [3] Examines contemporary theory and research on educational organizations, including organizational design, performance, and effectiveness. These cognitive understandings form the basis for examining current operations in students’ places of employment. Students complete an in-depth case analysis of current organizational conditions in their organizations. Prerequisite: Matriculation in Ed.D. program.

EDD 823 Education Organizational Improvement and Change [3] Introduces students to theories and research on the dynamics of individual, group, and organizational change in educational organizations. Using the case studies developed in EDD 822, students design an improvement plan that addresses a problem in their home organization. To the extent possible, students implement one aspect of their improvement plan. Prerequisite: EDD 822.

EDD 824 Curriculum Theory and Research [3] Models and theories of curriculum planning are examined. Students critique the central epistemological assumptions that guide our understanding of the role of the formal and informal curriculum. The role of the educational leader in facilitating curriculum reform is analyzed. Prerequisite: Matriculation in Ed.D. program.

EDD 825 Seminar in Instructional Development [3] Examines current issues, trends, and research in instructional development. Other topics include learning theory, the use of human and technological resources to increase instructional effectiveness, and assessment of student outcomes. The roles of administrators and supervisors in facilitating team efforts to improve instructional programs are examined. Prerequisite: EDD 824.

EDD 826 Professional and Ethical Issues in Educational Leadership [3] Critical examination of the ethical issues of concern in leading organizational change in school systems. Students analyze dimensions of reflective practice, professional ethics, licensing and accreditation, and collegial service delivery. Recent efforts to restructure education are used as a forum within which these professional and ethical issues are examined. Prerequisites: EDD 820, 821, 823, and 825.
EDD 827 Seminar in Educational Leadership [3] This course is designed to promote critical analysis of contemporary leadership frameworks and consideration of their utility in educational organizations. Students become familiar with leadership strategies and skills through involvement with different case situations and simulations of issues confronting practicing educational leaders. Extensive role-playing is designed to provide students with opportunities to examine how they function as educational leaders in these simulated situations. Prerequisite: EDD 826.

EDD 830 Advanced Planning [3] Students develop conceptual skills and understandings of the need for and approaches used in planning within educational organizations. Students complete a strategic plan or comprehensive program plan and prepare and disseminate the results of their planning exercises. Prerequisites: EDD 827 and 840.

EDD 831 Empowerment of Professional Staff [3] Students examine the research on work group effectiveness, with a particular focus on ways in which professional staff in educational organizations can achieve increased responsibility and involvement in improvement activities. Key concepts include team building, job enrichment, group facilitation, participatory decision making, and site-based management. Prerequisites: EDD 827 and 840.

EDD 832 Human and Fiscal Resource Management [3] Provides an understanding of the administrative processes needed to manage human and fiscal resources effectively in educational organizations. Key concepts include use of management information systems, resource planning, personnel administration, facilities planning and operation, budgeting, and collective bargaining. Prerequisites: EDD 827 and 840.

EDD 833 Integrating Services for Children and Families [3] The purpose of this course is to help individuals interested in developing leadership skills in early childhood programs to conceptualize systems for integrating services for young children and their families, and to design innovative models for integrated service delivery systems. Prerequisites: EDD 827 and 840.

EDD 834 Higher Education Foundations [3] This course covers the development of the systems of higher education in the United States, the different missions and goals of colleges and universities, the multiple sectors of higher education, and the roles and responsibilities of different stakeholders or clients. Special attention is paid to the development of postsecondary institutions and the expectations of different institutions for administration, faculty, staff, students, and community partners. Prerequisites: EDD 827 and 840.

EDD 835 Higher Education Law [3] This course emphasizes the legal environment of postsecondary institutions, legal processes, analysis, and problems incurred in the administration of colleges and universities. It covers constitutional mandates of due process and equal protection, nondiscrimination in employment and educational programs, privacy and openness, tenure and academic freedom, contractual obligations, and program discontinuance. Prerequisites: EDD 827 and EDD 840.

EDD 839 Special Topics in Educational Leadership [3] Advanced seminar examining contemporary educational leadership practices and/or emerging policy issues influencing the practice of educational leadership. Prerequisite: Permission of instructor.

EDD 840 Research Skills for Educational Leaders [3] Reviews ways in which qualitative and quantitative research designs and methods are used to conduct research in administration, leadership effectiveness, and organizational improvement. The validity and utility of these two complementary approaches to conducting research in areas related to educational leadership are examined. Prerequisite: Matriculation in Ed.D. program.

EDD 842 Qualitative Research Methods [3] Examines the issues and practical problems associated with using selected qualitative research methods. Students examine recent approaches to the conduct of qualitative research and complete a qualitative research proposal. Prerequisite: EDD 840.

EDD 844 Quantitative Research Methods [3] This course examines quantitative methods and design typically used in educational research. Statistical areas include sampling theory and inferential statistics, such as ANOVA, factorial analysis (two-way ANOVA), ANCOVA, linear and multiple regression, and factor analysis. Students use a statistical package to analyze education databases. Prerequisites: EDD 840 and permission of instructor.

EDD 850 Doctoral Internship—Phase One [3] Students complete an internship that provides them with structured opportunities to perform supervised administrative functions in a
variety of educational settings. Students will work with faculty advisors to identify placement sites appropriate to their program of study in settings outside their immediate work environment. Internships are arranged in the semester prior to enrollment in EDD 850. Prerequisite: Permission of instructor. Laboratory fee.

EDD 851 Doctoral Internship—Phase Two
[3] Phase two of the doctoral internship has been designed to provide students with additional structured opportunities to perform advanced administrative leadership functions. The student will be assigned major responsibility for addressing an educational leadership issue at the field site. Prerequisites: EDD 850 and permission of instructor. Laboratory fee.

EDD 852 Synthesis Seminar
[3] Doctoral students in educational leadership review and synthesize their programs of study, and develop a literature review. Successful completion of EDD 852 results in permission to enroll in the Dissertation Proposal Seminar (EDD 860). Prerequisite: Permission of the faculty advisor.

EDD 860 Dissertation Proposal Seminar
[3] This course is designed to enable students to develop a dissertation research proposal in a supervised environment. Students examine research design concepts, learn the mechanics of writing a dissertation, identify their research topics, and design a potential proposal study. Successful completion of EDD 860 results in advancement to candidacy. Prerequisite: Permission of the faculty advisor.

EDD 861 Doctoral Dissertation—Phase One
[3] Students work closely with their dissertation research supervisor to refine their research proposal, develop instrumentation, and collect data. Prerequisites: EDD 860 and permission of advisor. Repeatable once.

EDD 862 Doctoral Dissertation—Phase Two
[3] Students work closely with their dissertation research advisors to analyze data, develop findings and conclusions, and complete the written dissertation research report. Prerequisites: EDD 861 and permission of advisor. Repeatable once.

EDD 863 Doctoral Dissertation—Phase Three
[1] Serves as a vehicle for continuous enrollment for students in the Doctoral Program in Educational Leadership to complete their dissertations. Prerequisites: EDD 862 and permission of advisor.

Department of Nursing
Master of Science in Nursing

The Department of Nursing emphasizes quality teaching complemented by scholarly and creative expression, clinical expertise, dedicated community service, and service to the profession of nursing. We are dedicated to the preparation of people who enrich the nursing profession by responding flexibly and creatively to both professional and societal issues. Graduates increase their professional base of expertise and add depth in scholarship.

The Master of Science in Nursing (M.S.N.) program is a core advanced-practice curriculum that allows three areas of role focus: Community/Public Health Nursing, Nursing Education, and Nursing Management.

Post-Master’s Teaching Certificate in Nursing

The Post-Master’s Teaching Certificate in Nursing (PMC) is a 12-credit graduate certificate program designed for nurses who focused on a specialty other than nursing education in previous graduate study and who now have the interest or need for teacher preparation. Built upon courses within the M.S.N. curriculum, the certificate is designed to provide students with in-depth skills and knowledge they need to be competent and confident in nurse educator roles. Designed by faculty and nurse educator alumni, the program begins with a 1-credit course that orients participants to the “tool kit” for teaching effectiveness, and a second 1-credit course to provide them with an opportunity to observe the educator role. The final course provides mentoring in the educator role in the setting of the student’s choice.

Courses for the PMC (12 credits):
NUR 615 Theories of Learning and Teaching for the Healthcare Professions
NUR 627 Theoretical Basis of Nursing Education
NUR 631 Practicum and Seminar in Nursing Education
NUR 632 Advanced Role Observation
Department of Nursing Policies

Graduate Admission Requirements

Graduate admission requirements for the Master of Science in Nursing:

1. Bachelor’s degree from a nursing program accredited by NLNAC or CCNE, or a bachelor’s degree and completion of B.S.N. competencies in related fields.
2. Undergraduate grade point average of at least 3.0 on a 4.0 scale or completion of 6 credits at the graduate level with a minimum grade point average of 3.3.
3. Current licensure or eligibility for licensure as a registered nurse (RN) in the state of Connecticut.
4. Two letters of recommendation, preferably one from an academic source and one from a professional source in the most recent nursing position.
5. Transcripts from all undergraduate programs and graduate-level courses.
6. At least one year of clinical practice.
7. Letter of intent.

Application Deadlines

Priority filing date for the spring semester is November 15. Priority filing date for the fall semester is April 15.

Accreditation and Memberships

The Master of Science in Nursing program is accredited by the State of Connecticut Board of Governors for Higher Education and by the Commission on Collegiate Nursing Education (CCNE). CCNE maintains program information on tuition, fees, and length of program. Contact the CCNE at One Dupont Circle NW, Suite 530, Washington, DC 20036-1120; 202.887.6791.

The Department of Nursing belongs to the following organizations: American Association of Colleges of Nursing, National League for Nursing, and Connecticut League for Nursing.

International Nurses

Nurses from countries other than the United States must obtain RN licensure in Connecticut. To be eligible to sit for the state licensing exam, a graduate of a foreign nursing program must first pass a two-part exam given by the Commission on Graduates of Foreign Nursing Schools, 3600 Market Street, Suite 400, Philadelphia, PA 19104-2651, U.S.A.; telephone: 215.349.8767; fax: 215.662.0425.

*Applicants who hold a non-nursing bachelor’s degree will be considered for admission on an individual basis.

Academic Standards

A grade point average of 3.0 is required for graduation. Students who receive more than one C at the graduate level will be counseled to leave the program.

Scholastic Requirements

Master’s degree students in nursing must develop a research proposal, produce a professional portfolio, and write a manuscript suitable for professional publication.

Public Health Nursing

Required credits: 34

The Public Health Nursing focus in the M.S.N. program prepares nurses to assume leadership roles in public health nursing in a variety of healthcare settings, including schools, home care, occupational health, and public health and community-based agencies. Nurses are prepared to synthesize nursing and public health theory in promoting and preserving the health of families, aggregates, and populations.

Core Courses (15 credits)
NUR 609 Perspective Transformation I
NUR 610 Theoretical Perspectives in Nursing
NUR 619 Scholarly Inquiry in Nursing
NUR 621 Advanced Nursing
NUR 633 Perspective Transformation II
NUR 634 Research Proposal Preparation
NUR 635 Graduate Research

Courses for Public Health Role

(10 credits)
NUR 651 Epidemiology
NUR 629 Theoretical Basis of Public Health Nursing
NUR 661 Practicum in Public Health Nursing

Cognate Courses (9 credits)

Students select cognate courses from nursing and other disciplines to support their specialty areas.

Nursing Education

Required credits: 34

The Nursing Education focus in the M.S.N. program prepares nurses for educator roles in academic environments and staff development roles in healthcare practice settings. Nurses are prepared to synthesize nursing and education theory to facilitate learning in individual and groups in diverse settings.
Core Courses (15 credits)
NUR 609 Perspective Transformation I
NUR 610 Theoretical Perspectives in Nursing
NUR 619 Scholarly Inquiry in Nursing
NUR 621 Advanced Nursing
NUR 633 Perspective Transformation II
*NUR 634 Research Proposal Preparation
*NUR 635 Graduate Research

Courses for Educator Role (10 credits)
NUR 615 Theories of Learning and Teaching for the Healthcare Professions
NUR 627 Theoretical Basis of Nursing Education
NUR 631 Practicum and Seminar in Nursing Education

Elective Courses (9 credits)
Students select elective courses from nursing and other disciplines to support their specialty areas.

Nursing Management
Required credits: 34
The Nursing Management focus in the M.S.N. program prepares nurses for leadership and management roles in diverse practice settings. Nurses are prepared to synthesize leadership, management, and policy theory in influencing healthcare systems and advancing nursing practice.

Core Courses (15 credits)
NUR 609 Perspective Transformation I
NUR 610 Theoretical Perspectives in Nursing
NUR 619 Scholarly Inquiry in Nursing
NUR 621 Advanced Nursing
NUR 633 Perspective Transformation II
*NUR 634 Research Proposal Preparation
*NUR 635 Graduate Research

Courses for Manager Role (10 credits)
NUR 600 Theories of Economics and Finance for Nurse Administrators
NUR 625 Theoretical Basis of Nursing Management
NUR 630 Practicum and Seminar in Nursing Management

Cognate Courses (9 credits)
Students select cognate courses from nursing and other disciplines to support their specialty areas.

*Optional

Course Descriptions

NUR 440 Pre-M.S.N./Leadership [1] This course is required for the R.N. without a B.S.N. in nursing who is applying to the M.S.N. program. Key leadership concepts, such as change, conflict management, and leadership styles, included in the undergraduate B.S.N. program are covered. Prerequisite: RN with a bachelor’s degree that is not in nursing.

NUR 441 Pre-M.S.N./Health Assessment [1] This course is required for the RN without a bachelor’s degree in nursing who is applying to the M.S.N. program. The course covers major health assessment concepts that are part of the undergraduate B.S.N. program, such as interviewing, physical examination, and documentation of health problems. The course includes a lab format. Students practice health assessment skills on each other. Prerequisite: RN with a bachelor’s degree that is not in nursing.

NUR 442 Pre-M.S.N./Community Health [2] This course is required for the RN without a bachelor’s degree in nursing who is applying to the M.S.N. program. Key concepts and major issues of community/public health nursing, such as community theory and assessment, epidemiology, and environmental health, are covered. Prerequisite: RN with a bachelor’s degree that is not in nursing.

NUR 510 Healthcare Informatics [3] This course introduces healthcare professionals to the study of healthcare informatics. Federal, state, and private initiatives are demanding the development and use of electronic health-record systems and other technology to improve the quality, safety, and evidence base of care. It is critical that healthcare professionals in all roles and at all levels keep pace with the latest advances in informatics. This course provides students with practical knowledge, and opportunities for providing optimal healthcare services in today’s high-technology environments—important even when that technology has not yet been fully implemented. Prerequisite: Students should have basic computer literacy skills or permission of instructor.

NUR 600 Theories of Economics and Finance for Nurse Administrators [3] The overall purpose of this course is to prepare nurse administrators to manage their financial areas of supervision effectively and efficiently by understanding and applying basic knowledge and practice of economics, reimbursement, and fiscal management. There will be an opportunity
provided for the student (or group of students) to develop a business plan for a potential healthcare-related business for the current economic/reimbursement environment. Prerequisite: Matriculation in nursing graduate program or permission of instructor.

NUR 607 Writing in Nursing [3] This course focuses on writing skills essential for professional nurses in the context of their professional responsibilities. These include clear exposition, persuasive argument, effective synthesis, and mastery of mechanics, including APA format. Students will write every week both in class and in take-home assignments. Prerequisite: Matriculation in nursing graduate program or with permission of instructor.

NUR 609 Perspective Transformation I: Socialization into a Community of Scholarly Caring [3] During educational programs, nurses experience a transformation in which their perspectives on themselves, their profession, and their opportunities in the profession expand. This course facilitates students’ socialization from new graduate student to budding scholar and prepares them for success in graduate study. Topics include self-assessment as learner and scholar; scholarly reading, writing, and dialoguing; time management; academic computing skills; and portfolio development. Prerequisite: Matriculation in nursing graduate program or with permission of instructor.

NUR 610 Theoretical Perspectives in Nursing [3] Selected concepts, theories, and phenomena derived from nursing, behavioral, biological, and public health sciences are examined for applicability in assessing and understanding the individual, family, group, and community response to health and illness. Strategies for the delivery and evaluation of nursing care are discussed within the context of the learner’s evolving conceptual framework for practice. Prerequisites: NUR 609 and matriculation in nursing graduate program.

NUR 611 Continuing Professional Development: Principles and Practices [3] The focus of this course is role development for continuing education and staff development practice. Students learn by doing as well as from observing and interacting with experts. Contemporary issues and trends in this advanced-practice nursing specialty are addressed from a historical perspective. Students critically analyze and seek solutions for common problems facing educators in practice in a variety of settings with diverse learners. Working in groups, students develop a learning module relevant to their interests that meets design criteria in nursing continuing education.

NUR 612 The Process of Patient Education [3] The focus of the course is the implementation of patient education programs at the individual level that meet the goals of healthcare providers and clients. The influence of learner readiness, health values, culture, and literacy on effective patient education is explored. From a broader perspective, health education and promotion are examined in the context of the social, political, and economic influences of health. Additional exploration of relevant patient education topics includes critical analysis of the role of Internet technology in health education, current research in patient education, and the use of outcome criteria to evaluate health education programs.

NUR 615 Theories of Learning and Teaching for the Health Professions [3] A survey of educational theory and practice as relevant to the teaching role. Distinctions are made between teaching and learning, domains of learning, and approaches used with adult learners. Constraints of application of theory within specific settings (e.g., healthcare, adult learning, special classrooms) are highlighted. This course is designed for master’s-level students interested in an emphasis on the educator’s role and is also relevant for management students. Prerequisite: Matriculation in nursing graduate program or with permission of instructor.

NUR 616 Role of Clinical Educator [3] This course provides students with the knowledge and skills to develop and implement innovative, efficient, and practical teaching strategies for use in the clinical setting. Students discuss entering the instructional role and personal development within this role, managing the clinical day, and providing effective clinical instruction and clinical supervision and evaluation methods. Strategies to support and encourage student learning through the development of critical-thinking skills and reflective practice, while fostering caring in clinical practice, are explored. Legal and ethical issues, evidenced-based practice, and specific student-centered concerns are also discussed.

NUR 617 Quality Improvement Evaluation [3] This course introduces the student to various theories of quality improvement process that can be applied to positions in management, education, and clinical practice. The course covers outcomes evaluation by analyzing the manage-
ment, policies, procedures, education, and associated costs that are prohibitive to quality improvement within an organization. The student designs a quality-improvement project by applying the theories and knowledge of quality improvement

NUR 619 Scholarly Inquiry in Nursing [3] This course focuses on the development of research skills through critique of written research reports, and the application of quantitative or qualitative research methods to the development of the research proposal. Emphasis is placed on the relationship of research to the knowledge base of nursing and on the utilization and communication of nursing research to influence practice in all settings. Prerequisites: NUR 609 and NUR 621. Prerequisite or concurrent: NUR 610.

NUR 621 Advanced Nursing Practice [3] This seminar course looks at topics germane to the advanced nursing practice roles in education, community/public health, and management. Students engage in the process of becoming politically influential on issues related to policy formulation that benefits all people and the professional practice of nursing. Students investigate and analyze policy, political dilemmas within the healthcare system, and educational/leadership roles that impact nursing practice. Incorporated into the course is the study of legal, ethical, and contemporary issues. Prerequisite: NUR 609.

NUR 625 Theoretical Basis of Nursing Management [3] This course provides the student with concepts and theories from nursing, business, and other disciplines related to nursing administration. Evaluation of mission and philosophy, goals and objectives, professional standards, and organizational efficiency is emphasized. Administrative processes, human relations dimensions, communication patterns, organizational power, budgeting and finance, and interdisciplinary strategic planning are explored. Prerequisites: NUR 610, NUR 619, NUR 621, and minimum of 3 credits in cognate courses. Prerequisite or concurrent: NUR 600.

NUR 626 Psychoeducational Strategies [3] As educators, managers, or clinicians, nurses need to be self-aware, active listeners, skilled communicators, and effective teachers. This course introduces students to innovative teaching strategies that can be used to stimulate learning in individuals and groups in any setting.

NUR 627 Theoretical Basis of Nursing Education [3] This course provides the student with theories and concepts relevant to the nurse educator role. Curriculum development, analysis and evaluation, classroom and clinical teaching strategies, and evaluation of student and program outcomes are the major themes of the course. Various nurse educator roles are explored. Students are expected to think critically about the process of education and the role of teachers, and to develop a personal philosophy of teaching and learning. Curriculum development and implementation are analyzed from the perspective of systems theory. Prerequisites: NUR 609, NUR 610, NUR 619; NUR 615, or concurrent.

NUR 629 Theoretical Basis of Public Health Nursing [3] This course focuses on advanced nursing practice in the community. Standards of community/public health nursing and theories of community/public health are examined in relation to the care of populations and aggregates. The student develops a program plan based on a community/needs assessment and population risk assessment. The student examines global health issues and their effect on public health. Prerequisites: NUR 609, NUR 610, NUR 619, NUR 621, and NUR 651.

NUR 630 Practicum and Seminar in Nursing Management [3–4] This course gives students the opportunity to apply theories and concepts from nursing and other disciplines in a nursing leadership or management practicum. In consultation with faculty, students are placed with nurse leaders and managers to study program initiatives and departmental units as they interface with other institutional systems. Intervention strategies are designed by students to deliver effective and efficient clinical nursing services. Prerequisites: NUR 600 and NUR 625.

NUR 631 Practicum and Seminar in Nursing Education [3–4] This is the experiential component of the nurse educator theory course. Students preparing to be staff development instructors in community, hospital, or long-term care facilities work with a preceptor in a staff development department. Students preparing to teach in schools of nursing are placed in educational settings. Opportunity is provided to explore the components of the role and evaluate oneself in the performance of the role. The suprasystem of the institution is identified, and the role the nursing department fills within that system is explored. Prerequisites: NUR 615 and NUR 627.
NUR 632 Advanced Role Observation [1] This course provides the opportunity to observe the role of advanced practice nurses in education, management, and community/public health settings. This is an elective course that M.S.N. students may choose in order to take advantage of a practicum opportunity that is not available during the semester of their planned practicum/seminar courses. Up to 40 hours of role observation may be earned in this course. The student must submit an application to her/his faculty advisor that explicates the nature of the role observation and self-directed learning goals in order to obtain permission for this course. The course is required for participants in the Post-Master’s Teaching Certificate for Nurses program, to be completed prior to NUR 627 and NUR 631.

NUR 633 Perspective Transformation II [3] This capstone course is designed to facilitate the expression of transformation in perspective of self, profession, and professional futures for graduate students moving into advanced practice roles in education, management, and community/public health. Topics include professional publication, résumé development, interviewing strategies, career opportunities, and portfolio completion. Postgraduate and doctoral education opportunities are also addressed. Students articulate the perspective transformation experienced during their program of study.

NUR 634 Research Proposal Preparation [1] This optional course assists the graduate nursing student to prepare a research proposal for institutional review board approval. The student selects a faculty advisor appropriate to the research project who critiques drafts until the proposal is ready for submission. Prerequisite: NUR 619.

NUR 635 Graduate Research [1–3] This optional course assists the graduate student to complete the data collection and analysis components of a research project, prepare the results of the study in article format for publication, and present findings for the utilization of research in practice. Prerequisite: NUR 619.

NUR 636 End-of-Life Nursing Care [3] This course focuses on end-of-life issues to equip nurses with advanced knowledge for providing optimum end-of-life care for patients, families, and communities. Course content includes symptom and pain management, communication, last hours of life, and bereavement. The course also specifically addresses ethics, culture, economic and sociopolitical effects on our nation’s care for the dying, and the role of healthcare professionals in achieving quality care at the end of life. The course is a certified course of the End-of-Life Nursing Education Consortium (ELNEC). Nurses who successfully complete this course are designated ELNEC-Trained by the American Association of Colleges of Nursing. The course is interdisciplinary in its approach and open to graduate students of other disciplines. Undergraduate nursing students may take this course with permission of the instructor.

NUR 640 Contemporary Topics in Nursing [1–3] Selected topics in nursing and nursing-related areas, varying from year to year in accordance with the needs of the curriculum and learners.

NUR 645/445 Emergency and Disaster Preparedness [3] This course provides an overview of emergency and disaster preparedness. Beginning with definitions and scope of natural disasters, pandemics, and terrorism, students consider homeland security, planning and operations, roles of citizens and the professions, barriers to preparedness, legal considerations, psychological responses, and ethical issues. Using group facilitation and case study method, the course prepares students for a leadership role to advance community emergency preparedness, volunteer management, and community recovery activities. The course establishes the foundation for both personal and professional emergency preparedness planning and action. Prerequisites: Undergraduate or graduate standing in nursing and health professions; other students by permission of instructor.

NUR 651 Epidemiology [3] Epidemiology provides the scientific foundation for community/public health practice. This course assists students in developing a working knowledge of descriptive and analytical epidemiology used to examine disease occurrence and health status in communities. Emphasis is placed on skill building in the areas of fundamental methodologies and critical analysis of published epidemiological studies. The student uses epidemiological data in applying knowledge to disease-prevention activities. This course is appropriate for healthcare professionals and human service students. Prerequisite: Matriculation in graduate program or permission of instructor.
NUR 654 Management of Human Resources: Concepts and Principles for Healthcare Professionals [3] This course provides the healthcare manager with the theoretical knowledge base, concepts, and practices to lead employees to meet organizational, departmental, and unit needs through effective human resource management. In addition to focusing on the traditional functions of recruitment, selection, training, development, employee relations, and compensation and benefits, the course provides a solid foundation of skills and understanding that will support the healthcare manager through analysis of theories, policies, and practices.

NUR 661 Practicum and Seminar in Public Health Nursing [3–4] This course provides the opportunity for students to observe the role of the public health nurse in advanced practice. Students apply community/public health concepts and theories in collaboration with a preceptor in a selected site with a population congruent with the student’s interest. The practicum site may be local, regional, national, or international. Students implement a project relevant to the practice setting. Prerequisite: NUR 629.

NUR 680, 681 Independent Study in Nursing [1–3, 1–3] Planned jointly by learner and faculty member, an individualized project designed to give the learner opportunity to develop and pursue a special interest in nursing. Prerequisite: Graduate standing.

NUR 690, 691, 692, 693 Special Topics in Nursing [1–4] Elective courses in this category give in-depth information about aspects of the functional areas chosen by graduate students. These courses reflect current major trends in community/public health, nursing education, and/or management that are predicted to have a major impact on the dimension of nursing chosen by the student.

### Department of Physical Therapy

#### Doctor of Physical Therapy

Professor Certo (Department Chair)
Associate Professors Ball, Crane, Gannotti, Wetherbee
Assistant Professors Gangaway, Goodworth, Higgins, Leard, Veneri


#### Professional D.P.T. Program

All students must complete a bachelor’s degree and all prerequisite courses before entering the Doctor of Physical Therapy program. The program is designed to educate graduates who are generalists dedicated to the promotion of health and the prevention and rehabilitation of physical disabilities. Graduates are also prepared to meet the intellectual, social, cultural, and economic challenges of our changing healthcare system.

#### Facilities

The on-campus facilities for the Department of Physical Therapy are located in the Charles A. Dana Hall, which is part of the Integrated Science, Engineering, and Technology complex. The program has two Hoffman physical therapy clinical skills teaching laboratories and four dedicated research laboratories for conducting both faculty and faculty-mentored research activities. These research spaces include a human performance research lab with a force platform, for the study of all aspects of human movement as they relate to biomechanical principles; a motor control lab that contains specialized equipment and technology for research related to motor control and motor learning; and a balance and mobility laboratory for the study and research of the interaction of physical variables on human motor control. Balance responses can be measured with acceleration, velocity, and position-based sensors to measure muscle activity.
University Physical Therapy, LLC, is a faculty private-practice facility located in the Sports Center at Health Services. Physical therapy providers include adjunct and full-time faculty from the physical therapy program. Students in the physical therapy program are linked to the clinic through various professional courses called integrated clinical experiences. In addition, the clinic serves as a site for student internship.

Off-Campus Clinical Facilities
Clinical education settings for the Physical Therapy program are selected on the basis of their ability to provide supervision by professional staff and to offer services to diverse client populations, as well as their compatibility with the University’s and program’s mission and philosophy. The department currently has contracts with approximately 400 facilities in the Greater Hartford area and throughout the United States. Practice settings include healthcare, educational, and community (public and private) agencies.

Admission Requirements
A completed application and official transcripts showing evidence of completion of a baccalaureate degree are required for admission. If the degree was obtained in a foreign country, evaluation of degree completion must be provided through the World Education Services Program. Applicants are responsible for the gathering and submission of all required materials by February 1. An undergraduate GPA of 3.0 or higher is required for application consideration.

Applicants must submit the following:
1. Three letters of reference (one must be from a course instructor or academic advisor, one from a supervisor in a professional or other work capacity, and one from another individual in either capacity)
2. Scores on the aptitude portion of the Graduate Record Examination (GRE): minimum scores of 500 on the verbal, quantitative, and analytic portions of the GRE are strongly recommended. Applicants with more than one subtest score below 500 will not be considered (with the exception of the verbal score of those individuals for whom English is a second language). For those for whom English is a second language, a minimum score of 550 on the TOEFL is necessary. Official scores of all required examinations must be received by the University by the February 1 deadline.

3. One letter of intent addressing the question specified in the graduate application
4. A typewritten page that documents healthcare-related experience, of which 10 hours are required
5. Transcripts for all undergraduate and postgraduate academic work
6. Selected candidates may be invited for interviews prior to admission.

Application Deadline
All relevant materials must be submitted by the February 1 application deadline. Incomplete applications will not be considered.

Prerequisites
The following prerequisite courses must have been completed at the college level:
1. Biology: 4 credits—one course with laboratory
2. Human anatomy: 4 credits—one course with laboratory
3. Human physiology: 4 credits—one course with laboratory

Note: When anatomy and physiology are taken as a combined course, two semesters (i.e., 8 credits) are necessary to meet the requirements.

4. Chemistry: 12 credits—general chemistry, including two-course sequence with laboratory and either organic or biochemistry with laboratory
5. Physics: 8 credits—two-course sequence with laboratory
6. Statistics: 3 credits—course to include descriptive statistics, correlation, and introduction to inferential statistics
7. Precalculus or calculus: 3 credits
8. Psychology: 9 credits—courses include general, developmental, and abnormal psychology
9. Exercise physiology: 3–4 credits—one course
10. Humanities: 9–12 credits
11. Social sciences: 9–12 credits

Courses taken to fulfill prerequisites 1–9 above must be completed with a GPA of 3.0 or higher, with no grade below a C, in order for the application to be considered. An applicant may not have more than two required courses still in progress by the February 1 deadline.
Professional Program

Academic Policies

Candidates must complete a minimum of 99 credits, including a minimum of 32 weeks of clinical experience to fulfill degree requirements. The curriculum is designed for full-time study only.

Degree candidates must attain an overall grade point average of B (3.0) or higher and must achieve a grade of C (73 percent) or better in all physical therapy courses throughout the entire program, as well as display ethical, personal, and professional qualities needed to fulfill the role of a physical therapist. Students who fail to complete one course successfully in the program must repeat that course prior to continuing in the program. All courses required for the major, with the exception of clinical experiences, must be taken for a letter grade and may not be taken on a Pass/No Pass basis. Satisfactory completion of the clinical affiliation component is a requirement for obtaining the doctoral degree in physical therapy.

Students are issued a warning letter if their GPA falls below 3.0 in one semester. Those who have two sequential semesters of GPAs below 3.0 will be dismissed from the Physical Therapy program. Students who fail any combination of two courses at any point in the professional curriculum (didactic and/or clinical) are also dismissed from the program. For detailed information on all academic policies, please refer to the Physical Therapy Student Academic and Clinical Manual.

Clinical Education

In addition to the didactic and laboratory course work, students are required to complete and pass all three clinical education experiences. Clinical education experiences are arranged by the University in conjunction with the student and may take place in a number of sites throughout the United States. During these experiences, students are responsible for all clinical education fees ($1,600 per course for DPT 630, DPT 730, and DPT 740), living expenses, and/or transportation expenses associated with the clinical education experience. Students are evaluated using the American Physical Therapy Association’s Clinical Performance Instrument. The scores on this form are converted to a Pass/No Pass using the criteria set by the University of Hartford’s Physical Therapy program. Satisfactory completion of each clinical experience is a requirement for obtaining the D.P.T. A grade of No Pass for a clinical experience constitutes a failure of a professional course.

Withdrawal and Discontinuance

If a student is failing a clinical education experience, he or she may be administratively withdrawn at the discretion of the academic coordinator of clinical education or at the request of the clinical instructor. When this occurs, the student fails that clinical experience and another site will be pursued. A second failure results in the dismissal of the student from the Physical Therapy program. Failure in any two professional courses (i.e., two professional courses with a grade of C– or below, or one professional course and one affiliation, or two affiliations) results in dismissal from the program. Should a student demonstrate unsatisfactory professional behavior, a written record is placed in the student’s academic file. Repeated incidents may lead to dismissal from the program.

Curriculum

The Doctor of Physical Therapy program is a three-year, full-time program.

First Year (D.P.T. 1)

Summer Semester
DPT 500 Gross Anatomy [2]
DPT 501 Gross Anatomy Laboratory [2]
DPT 504 Kinesiology [2]
DPT 505 Kinesiology Laboratory [1]
DPT 508 Pathophysiology for PT I [3]

Fall Semester
DPT 502 Biomechanics [2]
DPT 503 Biomechanics Laboratory [1]
DPT 506 Physical Agents in PT [2]
DPT 507 Physical Agents for PT Laboratory [1]
DPT 509 Pathophysiology for PT II [3]
DPT 510 Orthopedic Pathophysiology for Physical Therapists [3]
DPT 511 PT Examination and Intervention I [2]
DPT 512 PT Examination and Intervention I Laboratory [1]
DPT 530 Clinical Observation [1]

Spring Semester
DPT 600 Scientific Inquiry I [3]
DPT 608 Diagnosis and Intervention: Musculoskeletal Dysfunction I [3]
DPT 609 Diagnosis and Intervention: Musculoskeletal Dysfunction I Laboratory [2]
DPT 613 Diagnosis and Intervention in Cardiopulmonary Dysfunction [2]
DPT 614 Diagnosis and Intervention in Cardiopulmonary Dysfunctions [1]
DPT 615 Neuroscience [2]
DPT 616 Neuroscience Laboratory [1]
DPT 617 PT Examination and Intervention II [2]
DPT 618 PT Examination and Intervention II Laboratory [1]
DPT 625 Integrated Clinical Experience I [1]

Summer Semester
DPT 630 Clinical Education I (10 weeks) [0]

Second Year (D.P.T. 2)

Fall Semester
DPT 601 Scientific Inquiry II [3]
DPT 610 Diagnosis and Intervention in Musculoskeletal Dysfunction II [2]
DPT 611 Diagnosis and Intervention in Musculoskeletal Dysfunction, Laboratory [1]
DPT 619 Differential Diagnosis I [2]
DPT 620 Differential Diagnosis and Advanced Intervention Skills I Laboratory [1]
DPT 621 Motor Control and Motor Learning [2]
DPT 622 Motor Control lab [1]
DPT 624 Neuropathology for PT

Spring Semester
DPT 602 Scientific Inquiry [3]
DPT 603 Diagnosis and Intervention: Neurological Dysfunction Lecture [2]
DPT 604 Diagnosis and Intervention in Neurological Dysfunction Laboratory [1]
DPT 605 Diagnosis and Intervention in Pediatric Populations [2]
DPT 606 Diagnosis and Intervention in Pediatric Populations Laboratory [1]

Third Year (D.P.T. 3)

Summer Semester
DPT 700 Assistive Technology [2]
DPT 701 Disabilities Studies [2]
DPT 705 Educational Strategies for the Health Sciences [2]

Electives (vary by year, students choose one):
DPT 709 Advanced Pediatric Examination and Intervention [2]
DPT 710 Advanced Neurorehabilitation Seminar [2]
DPT 711 Examination and Intervention in Women’s Health [2]
DPT 714 Aquatic Physical Therapy [2]


Late Summer/Early Fall
DPT 730 Clinical Education II (9 weeks) [0]

Late Fall
DPT 702 The Business of Healthcare [3]
DPT 703 Pharmacology for the Health Sciences [3]
DPT 704 Doctoral Research [2]
DPT 707 Clinical Practice in Gerontology for the Health Sciences [2]
DPT 708 Diagnosis and Intervention for Older Adults Laboratory [1]
DPT 712 Differential Diagnosis and Advanced Intervention Skills II [2]
DPT 713 Differential Diagnosis and Advanced Intervention Skills Laboratory [1]

Spring Semester
DPT 740 Clinical Education III (12 weeks) [0]

(Total full-time clinical education: 31 weeks)

Course Descriptions

DPT 500 Clinical Gross Anatomy [2] A comprehensive study of the internal and surface anatomy of the human body with emphasis on the head, neck, trunk, and extremities. The relationships of neural, muscular, vascular, and lymphatic structures are discussed and demonstrated in a regional approach. Small-group problem solving and clinical application of anatomy to physical therapy clinical cases are expected. Students have access to both protected human material and anatomy dissection software. Prerequisites: BIO 112, 113, and PT major. Corequisite: PT 501.

DPT 501 Clinical Gross Anatomy Laboratory [2] This laboratory course is taught in conjunction with DPT 500. Laboratory and discussion sessions involve human cadaver projection in an effort to understand gross anatomical components and relationships of all systemic systems and the skeletal system. Surface palpation, self-paced computer software programs, and analysis of motion at each joint. Systems are reviewed based on gross anatomy lecture. Corequisite: PT 500. Laboratory fee.

DPT 502 Biomechanics [2] Biomechanics is a first-level introduction to the mechanical/anatomical bases of human movement. The subject matter is specifically developed for students in the health professions. An interdisciplinary approach is used, in which material from anatomy, physiology, and physics (mechanics) is integrated. Quantitative and qualitative biomechanical analyses of human movement are
studied from the perspective of kinematic and kinetic descriptions of multisegment motion, joint and muscle mechanics, and tissue biomechanical properties. Prerequisites: DPT 504 and PT major, or permission of instructor. Corequisite: DPT 503.

DPT 503 Biomechanics Laboratory [1] This course is designed in conjunction with DPT 502 to allow students to become intimately familiar with the concepts of biomechanics, the technologies of human measurement, and the application of biomechanical principles in joint movement analysis. Corequisite: DPT 502. Laboratory fee.

DPT 504 Kinesiology [2] Kinesiology is the study of human movement. This course presents a first-level integration of the mechanical/anatomical/neurological bases of human movement. The subject matter is specifically developed for students in the health professions. An interdisciplinary approach is used, in which material from anatomy, biomechanics, physiology, and neuroscience is integrated. Human movement is studied from the perspective of functional, kinematic, kinetic, and neurological descriptions of single-joint, complex-joint, and multi-joint motions. In this regard, topics of gait, posture, and balance receive a special focus. Students work in groups for some course content. Prerequisite: PT major or permission of instructor. Corequisite: DPT 505.

DPT 505 Kinesiology Laboratory [1] This course provides students with an opportunity to gain experience with various technology-assisted movement-analysis systems. Students learn how to acquire and interpret information from gait analysis, balance and postural measurements, and electromyographic recordings. Included in this course is a discussion of normal and abnormal gait and posture. Corequisite: DPT 504. Laboratory fee.

DPT 506 Physical Agents in Physical Therapy [2] A study of physical therapy interventions that include physical agents, mechanical agents, soft tissue mobilization, and electrotherapeutic agents. Case studies and current research are used to develop skill in making clinical decisions that are science- and evidence-based. Corequisite: DPT 507.

DPT 507 Physical Agents Laboratory [1] This laboratory course is designed in conjunction with DPT 506 and provides hands-on experience with planning, implementing, and modifying interventions that include physical, mechanical, and electrotherapeutic agents. Clinical decision making that is science- and evidence-based is emphasized. Corequisite: DPT 506. Laboratory fee.

DPT 508 Pathophysiology for Physical Therapists I [3] This is the first course of a two-course pathophysiology sequence. This course introduces the student to a conceptual framework regarding the majority of illnesses encountered in the scope of physical therapy practice, with a strong emphasis on medical diagnosis and management. Emphasis is placed on the relationship of medical presentation of signs/symptoms and its implication on physical diagnosis evaluation and treatment. This provides students with differential diagnostic skills for appropriate referrals outside of physical therapy. Prerequisite: PT major or permission of instructor. Laboratory fee.

DPT 509 Pathophysiology for Physical Therapists II [3] This is the second course of a two-course pathophysiology sequence. This course introduces the student to a conceptual framework regarding the majority of illnesses encountered in the scope of physical therapy practice, with a strong emphasis on medical diagnosis and management. Emphasis is placed on the relationship of medical presentation of signs/symptoms and its implication in physical therapy diagnosis, evaluation, and treatment. This provides students with differential diagnostic skills for appropriate referrals outside of physical therapy. Prerequisite: DPT 508.

DPT 510 Orthopedic Pathophysiology for Physical Therapists [3] A detailed study of orthopedic injuries and disorders. This course integrates the etiology, pathophysiology, clinical findings, clinical course, medical prognosis, medical/surgical treatment approaches, and physical therapy treatment approaches specific to orthopedic disorders in each region of the body. Lectures from orthopedic surgeons are included. Prerequisite: DPT 508.

DPT 511 Physical Therapy Examination and Intervention I [2] This is the first of four courses that use a case study approach to enhance problem solving skills and provide integration of various patient evaluations, goal setting and intervention outcomes within the scope of physical therapy. Topics include an introduction to evidence based practice and the profession of physical therapy (PT) including the origins and history of the PT profession, documentation, and basic PT skills. The roles and utilization of other healthcare practitioners and support personnel in patient management
are also considered. Students solve problems through analysis of case studies. Exploration of personal and professional ethics, values and goals will enhance the students’ ability to develop competence in these areas. Professionalism, verbal and written communication, and ethics are considered throughout. Prerequisite: DPT 500, 504. Corequisite: DPT 512.

DPT 512 Physical Therapy Examination and Intervention I Laboratory [2] This is the laboratory component of the first of four courses that use a case study approach to enhance problem solving skills and provide integration of various patient examination techniques, evaluation, PT diagnosis, goal setting, and intervention outcomes within the scope of physical therapy. The student will achieve beginning competency in the following basic patient-care techniques: bed positioning, bed mobility, exercise, wheelchair measurement and mobility, and patient safety. Manual muscle testing, goniometric measurement of joint range of motion, and motion and exercise prescription are incorporated into competency-based laboratory exercises. Corequisite: DPT 511. Laboratory fee.

DPT 530 Clinical Observation [1] This course is designed to provide physical therapy students with practical application of principles and techniques learned during the academic portion of the semester and a greater appreciation for the field of physical therapy. Students will participate in a weekly half-day observation at a selected acute, subacute, or outpatient orthopedic site in the Greater Hartford community, including the University of Hartford faculty clinical practice. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Prerequisite: DPT major.

DPT 600 Scientific Inquiry I [3] An introduction to the research methods used to document examination and intervention approaches within the profession of physical therapy. Using published clinical research, detailed issues of study design options, data collection tools, data analysis and conclusions to be drawn from the published research is explored. Prerequisite: PT major.

DPT 601 Scientific Inquiry II [3] Students identify faculty research mentors and work in small groups to begin to develop their research question or scholarly projects. This course moves the student from identification of the research question or scholarly project to literature review and proposal or scholarly project development. This becomes the research/scholarly project to be completed in DPT 602 and DPT 704. Prerequisites: DPT 600 and PT major. Laboratory fee.

DPT 602 Scientific Inquiry III [3] This course is a continuation of DPT 601 and moves the students through completion of data collection or scholarly project. Students continue to work in groups of four or five with their faculty mentor. Students may begin to prepare results for publication or complete the field application of their scholarly project. Prerequisites: DP 600 and DPT 601. Laboratory fee.

DPT 603 Diagnosis and Intervention: Neurological Dysfunction [2] A detailed study of the examination, evaluation, diagnosis, and prognosis of patients with neurological dysfunction. The course provides students with the knowledge and skills for differential diagnosis and developing intervention strategies for patients with neurological dysfunction that are grounded in evidence-based practice in physical therapy. Prerequisites: DPT 615, DPT 616, and DPT 624. Corequisite: DPT 604.

DPT 604 Diagnosis and Intervention: Neurological Dysfunction Laboratory [2] This course is designed in conjunction with DPT 603 to allow students the opportunity for hands-on experiences to develop physical therapy differential diagnostic techniques and intervention strategies used with patients with neurological dysfunction, with the integration of these skills into case studies. Corequisite: DPT 603. Laboratory fee.

DPT 605 Diagnosis and Intervention in Pediatric Populations [2] A study of examination and intervention approaches for children with diagnoses/conditions resulting in functional movement impairment. This course will emphasize normal development as well as medical, neurological and orthopedic considerations specific to pediatric disorders. Integration of clinical assessment tools and major theoretical approaches for the intervention of children will be stressed. Psychosocial and developmental considerations specific to children and families will be incorporated into all aspects of the course. Prerequisite: DPT 615. Corequisite: DPT 606.

DPT 606 Diagnosis and Intervention in Pediatric Populations Laboratory [1] A study of examination and intervention approaches for children with diagnoses/conditions resulting in functional movement impairment. The course emphasizes normal development as well as
medical, neurological, and orthopedic considerations specific to pediatric disorders. Integration of clinical assessment tools and major theoretical approaches for the treatment of children is stressed. Psychosocial and developmental considerations specific to children and families are incorporated into all aspects of the course. Corequisite: DPT 605. Laboratory fee.

**DPT 608 Diagnosis and Intervention: Musculoskeletal Dysfunction I** [3] A detailed study of the examination, evaluation, diagnosis, and interventions for patients with musculoskeletal disability, impairment, and functional limitations. The course also address preventative measures for clients who have the potential to develop musculoskeletal problems. There is an emphasis on the preferred-practice patterns as they relate to exercise prescriptions, integration of manual therapies and physical agents, and functional outcomes. Appropriate management of the psychosocial aspects of patients with musculoskeletal disorders and documentation of all aspects of patient management are reviewed. Current literature findings are incorporated so that students will be able to assess the methods of examination and intervention that they study. Prerequisite: DPT 608. Corequisite: DPT 611.

**DPT 611 Diagnosis and Intervention: Musculoskeletal Dysfunction II Laboratory** [1] This laboratory course is designed in conjunction with DPT 610 and provides an opportunity for students to apply examination and intervention techniques learned in DPT 610. Case-study format is used to assist students with the format of the Guide to Physical Therapy Practice and functional outcomes, and with the application of their evaluation skills to the spine, pelvis, and temporomandibular joint. Corequisite: DPT 610. Laboratory fee.

**DPT 612 Nutrition for Health Sciences** [3] The course is an introduction to the principles of nutrition and its influence on health. Also discussed are the principles of nutrition and exercise, with emphasis on counseling, patients, energy, fluid balance, and evaluating nutrition in the literature. Prerequisite: PT major or permission of instructor.

**DPT 613 Diagnosis/Intervention in Acute Care** [2] A detailed study of the management of patients in acute care with cardiopulmonary disorders. Principles of prevention, examination, evaluation, diagnosis, prognosis, intervention, and outcomes are discussed based on anatomical, physiological, and clinical medicine principles previously presented. Emphasis is on the integration of cardiopulmonary assessment and intervention, in both acute and chronic conditions, with the psychosocial aspects of disabilities; proper documentation; health promotion; and maximizing functional status. Scientific literature validating cardiopulmonary techniques assists students with intervention options and outcome measures. Prerequisites: DPT 508 and DPT 509. Corequisite: DPT 614.

**DPT 614 Diagnosis/Intervention in Acute Care Laboratory** [1] This course is designed in conjunction with DPT 613 to integrate clinical diagnosis, assessment, and intervention skills in the area of cardiopulmonary disorders in acute and chronic conditions. Intervention techniques are used that integrate knowledge of disease and outcomes using practice patterns consistent with evidence-based practice. Corequisite: DPT 613. Laboratory fee.
DPT 615 Neuroscience [2] An introduction to the neurological system with special emphasis on those aspects appropriate to rehabilitation treatments. Basic neuroanatomy and neurophysiology are presented with a discussion of issues that have clinical relevance. Topics include cranial and peripheral nerves; brainstem, midbrain, and cortical anatomy; vascular brain anatomy; cellular neurophysiology; spinal reflexes; and basic control system. Prerequisites: DPT 500 and PT major, or permission of instructor. Corequisite: DPT 616.

DPT 616 Neuroscience Laboratory [1] This neuroscience laboratory course is an adjunct to and coordinated with the neuroscience lecture course. The course is designed to reinforce functional neuroanatomy and clinical correlates of neuropathology. The laboratory session includes class discussion and a variety of active learning activities. The students have access to models of the various parts of the nervous system, large diagrams, and slides. Corequisite: DPT 615. Laboratory fee.

DPT 617 Physical Therapy Examination and Intervention II [2] This is the second of four clinical integration courses and builds on information presented in the first semester of the professional program. Cases presented in this semester include more complex patient problems, such as multicultural issues, managed care constraints, interdisciplinary role issues, documentation, and wound care. Students analyze the evidence-based professional literature that may impact patient management. Prerequisite: DPT 511. Corequisite: DPT 618.

DPT 618 Physical Therapy Examination and Intervention II Laboratory [1] This course is designed in conjunction with DPT 617 to allow students an opportunity to master clinical techniques, such as transfers, body mechanics, and assisted ambulation. Case studies are used to develop student skills. Concomitant issues, such as wound healing, psychosocial aspects of disability, and cultural competence, are also included in this laboratory. Corequisite: DPT 617. Laboratory fee.

DPT 619 Differential Diagnosis and Advanced Intervention Skills I [2] This course provides an integration of previous course work to problem-solve case studies. The multisystem case studies challenge students' abilities to use their current knowledge in the basic sciences, case management, human development, communication, physical therapy clinical sciences (musculoskeletal, cardiopulmonary, pediatrics, geriatrics, neuroscience, and neurology), and clinical reasoning skills to problem-solve aspects of diagnosis, evaluation, and intervention for each case study. Prerequisites: DPT 511 and DPT 617. Corequisite: DPT 620.

DPT 620 Differential Diagnosis and Advanced Intervention Skills I Laboratory [1] This laboratory/discussion course was designed in conjunction with DPT 619 to allow students an opportunity to learn how to use The Guide to Physical Therapy Practice, the disablement model, functional outcome measures, case studies, and intervention models. The course covers family and caregiver issues, managed care, patient functional outcomes, and higher-level case studies involving co-morbid conditions. The multisystem case studies challenge students' abilities to use their current knowledge in the basic sciences, case management, human development, communication, physical therapy clinical sciences (musculoskeletal, cardiopulmonary, pediatrics, geriatrics, neuroscience, and neurology), and clinical reasoning skills to problem-solve aspects of diagnosis, examination, and intervention for each case study. Corerequisite: DPT 619. Laboratory fee.

DPT 621 Motor Control and Motor Learning [2] This course provides a survey of theories of motor control and motor learning, the application of theory and research to understanding normal movement, and an introduction to implications of motor-control and motor-learning principles for older adults and individuals with movement dyscontrol. Prerequisite: DPT 615. Corequisite: DPT 622.

DPT 622 Motor Control Laboratory [1] This course reinforces the concepts covered in DPT 621 in the form of hands-on laboratory activities performed by the students. These activities help students to understand normal movement, and provide an introduction to implications of motor-control and motor-learning principles for older adults and individuals with movement dyscontrol. The course provides a foundation for subsequent courses in diagnosis and intervention. Corequisite: DPT 621. Laboratory fee.

DPT 623 Diagnostic Imaging [3] This course acquaints students with the process of image production for roentenography (x-ray), computed tomographic imaging (CT), and magnetic resonance imaging (MRI). Specific orthopedic pathologic conditions diagnosed by the use of these advanced modalities are discussed. Comparison of normal and abnormal anatomical variations for the skeletal system increases
students’ awareness of the intricacies of interpretation of pathologies acquired from x-ray, CT, and MRI procedures.

**DPT 624 Clinical Neuropathology for PT [3]**
A systematic approach is used to review neurologic pathology, e.g., disorders of the peripheral nerves, sensory system, upper motor neuron lesions, and vascular system. The study of functional neuroanatomy is reinforced through descriptions of pathophysiology and the concurrent clinical signs and symptoms. Disease etiology, pathophysiology, progression, and clinical prognosis are reviewed, and clinical examination techniques and technologies are introduced. Advances in neuroscience in the area of neuroplasticity and neuroregeneration are reviewed, with clinical application to rehabilitation practice.

**DPT 625 Integrated Experience I [1]**
This course is designed to provide physical therapy students with practical application of principles and techniques learned during the academic portion of the semester and a greater appreciation for the field of physical therapy. Students will participate in a weekly half-day observation at a selected acute, subacute, or outpatient orthopedic site in the Greater Hartford community, including University Physical Therapy, LLC. Students will work in small groups with a faculty or clinical mentor. Contact with clients and patients will help students to develop their basic clinical communication, examination, evaluation, diagnostic, and intervention skills. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Prerequisites: DPT 530 and PT major.

**DPT 630 Clinical Education I [0]**
This is the first of three full-time, supervised clinical education experiences. The experience is designed to bridge didactic information and clinical skills experiences. Basic skills are practiced in each setting, with the development of physical therapy examination, evaluation, diagnosis, and intervention skills. Students are supervised by qualified physical therapists. Clinical experiences occur in acute, subacute, or outpatient orthopedic settings, and integrate all aspects of physical therapy learned in the first year of the professional phase of the DPT program. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Prerequisites: All DPT I courses successfully completed.

**DPT 635 Integrated Experience II [1]**
A continuation of PT 625, this course provides physical therapy students with practical application of principles and techniques learned during the academic portion of the semester, as well as a greater appreciation for the field of physical therapy. Students participate in a weekly half-day observation at a selected acute, subacute, or outpatient site in the Greater Hartford community, including University Physical Therapy, LLC. Using the skills developed in the curriculum and previous clinical experiences, students expand their ability to evaluate, diagnose, and provide intervention for a wide variety of patients/clients in physical therapy. Students broaden their clinical decision-making, reasoning, judgment, and reflective clinical practice skills, and are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Prerequisites: DPT 625 and PT major.

**DPT 700 Assistive Technology [2]**
This course includes a review of the prescription, fabrication, and training of various types of adaptive equipment used in physical therapy management of patients with neurologic, musculoskeletal, and cardiopulmonary dysfunction. Topics include spinal, hip, knee, and ankle orthoses; lower-extremity prosthetics; wheelchair design; custom-seating fabrication; mobility and recreational devices; and home modifications. Prerequisites: DPT 603 and DPT 605.

**DPT 701 Disability Studies [2]**
The social, cultural, political, legislative, financial, and demographic influences on definitions of disability, rehabilitation practices, and disability policy are traced from early human civilization to the present. Emphasis is on disability rights movements in the United States and internationally, current topics in disability and disability policy, and cross-cultural/international issues. Prerequisite: PT major or permission of instructor.

**DPT 702 The Business of Healthcare [3]**
The principles of organizing, planning, directing, managing, controlling and communicating are related to the management of healthcare services. The course provides an overview of the principles of healthcare management from a fiscal, personnel, and administrative perspective. The impact of a changing healthcare system on reimbursement, program cost effectiveness, outcome management, cultural diversity, and ethical decision making is addressed. Students gain experience in program development by design-
ing programs and systems to evaluate program effectiveness. Prerequisite: PT major or permission of instructor.

DPT 703 Pharmacology for the PhysicalTherapist [3] This course addresses basic concepts and principles of pharmacology as applied to the typical patients undergoing rehabilitation treatment. An understanding of pharmacological agents used in modern medicine is important to the practice of physical therapy. Pharmaceutical agents can have important synergistic effects with rehabilitation treatments or can cause untoward effects that may interfere with treatment. Topics include drug administration, absorption, distribution, metabolism, sites and mechanisms of action, toxicity, and major categories of drugs seen by the physical therapist. Case studies will be used to evaluate the scientific evidence in evaluating the use and effectiveness of pharmacological intervention. Prerequisite: PT major or permission of instructor.

DPT 704 Doctoral Research [3] In this course students complete the research project or scholarly project begun in DPT 601 and 602 under the supervision of a faculty mentor. Students work in groups to complete the data analysis, or compile the information gathered through the scholarly project, and write the final document in a manuscript form. Students are required, at a minimum, to submit a proposal for presentation to the Graduate Research Symposium and/or the Connecticut Physical Therapy Association Annual Fall Conference. Prerequisites: DPT 600, DPT 601, and DPT 602. Laboratory fee.

DPT 705 Educational Strategies for thePhysicalTherapist [2] A course that introduces students to the principles of community, peer/professional, and patient education. This course discusses issues of educational psychology, goal and objective writing, learning styles, presentation skills and needs/educational assessment. Prerequisite: PT major or permission of instructor.

DPT 707 Clinical Practice in Gerontology for the Health Sciences [2] A study of the aging process and developmental tasks of later life. The course focuses on the biological, physical, social, psychological, cultural, and ethical issues associated with aging. Preventive healthcare models, community resources, and interdisciplinary and cross-cultural approaches in gerontology are included. Theoretical models of social gerontology and the aging process are presented. Prerequisite: PT major or permission of instructor. Corequisite: DPT 708.

DPT 708 Diagnosis and Intervention for Older Adults Laboratory [1] This laboratory course supports content presented in DPT 707 and enables physical therapy students to develop specific evaluative, diagnostic, and intervention skills in geriatric physical therapy. The course focuses on clinical and preventive physical therapy techniques designed to assess and improve function and quality of life for older adults. Corequisite: DPT 707. Laboratory fee.

DPT 709 Advanced Pediatric Seminar [2] This course is one of the elective options for PT students. It expands PT students’ understanding of issues related to the assessment of infants and young children, encourages students to develop and analyze their own concepts of development, and introduces students to several available tools used by physical therapists. The course covers theories of child development, family systems, assessment tools, and models of intervention, and offers opportunities for advanced clinical skills. Prerequisites: DPT 603 and DPT 605.

DPT 710 Advanced Neurorehabilitation Seminar [2] This course is one of the elective options for PT students. Students learn current evaluation and treatment procedures for persons with central and peripheral vestibular disorders. Differential diagnosis and the application of evidence-based practice principles to optimize outcomes are included. Prerequisite: DPT 603.

DPT 711 Women’s Health Seminar [2] This course is one of the elective options for PT students. This elective course provides the DPT student with entry-level information related to women’s health issues in physical therapy. It covers anatomical changes across the lifespan; the role of physical therapy for disorders specific to women; and women’s developmental, sociopsychological, and family concerns that have an impact on women and professionals, patients, and clients. Prerequisite: DPT 619.

DPT 712 Differential Diagnosis and Advanced Intervention Skills I [2] A lecture-format class that provides students with advanced knowledge and skill application of physical therapy examination, evaluation, and diagnostic skills for patients with neurological dysfunction. Integrated clinical experiences and complex patient case studies provide opportunities to apply intervention strategies that are grounded in evidence-based practice in physical therapy. Prerequisite: DPT 619. Corequisite: DPT 713.
DPT 713 Differential Diagnosis and Advanced Intervention Skills II Lab [1] A laboratory experience that provides students with the ability to learn manual skills necessary for advanced skills in physical therapy examination, evaluation, and diagnostic skills for patients with neurological dysfunction. Integrated clinical experiences and complex patient case studies provide opportunities to apply intervention strategies that are grounded in evidence-based practice in physical therapy. Corequisite: DPT 712. Laboratory fee.

DPT 714 Aquatic Physical Therapy Seminar [2] This course is one of the elective options for PT students. This course provides the DPT student with additional information related to aquatic physical therapy. Hydrodynamic principles and treatment techniques are covered in detail, with application of the principles and techniques in a pool. Evidence supporting the use of aquatic PT is introduced. Design of an aquatic physical therapy program and use of a pool are included. Prerequisite: DPT 506.

DPT 715 Advanced Sports Medicine Seminar [2] This is a multipurpose course designed to prepare the clinically trained physical therapist to examine and treat acute on-the-field injuries. The course provides information regarding common sports injuries, the prevention and care of acute injuries, postsurgical rehabilitation, and advanced rehabilitation approaches to return the athlete to a sport.

DPT 716 Advanced Wound Care Seminar [2] This course provides an opportunity to develop advanced, readily applicable skills for wound management. Topics include advanced modalities and debridement, wound etiologies and treatment, documentation, surface adaptations, and pressure distribution. Edema management and lymphedema are also discussed. Clinic visits provide an opportunity to observe the practical application of skills learned. Prerequisite: DPT 618.

DPT 730 Clinical Education II [0] An integration of all preceding course work with practice in the clinical environment. This clinical education experience is designed so that students develop skills in examination, diagnosis, prognosis, evaluation, and intervention. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health providers. Successful completion of all clinical education experiences and all academic work prior to this course is required. Prerequisite: DPT 630. Clinical education fee. (10 weeks)

DPT 740 Clinical Education III [0] An integration of all preceding course work with practice in the clinical environment. This clinical education experience enables students to develop skills in examination, diagnosis, prognosis, evaluation, and intervention. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, other health providers, and administrators. Prerequisites: DPT 630 and DPT 730. Successful completion of all clinical education experiences and of all DPT academic work is required. Clinical education fee. (12 weeks)

Master of Science in Prosthetics and Orthotics

Professor Certo (Department Chair)
Associate Professors Ball, Crane, Gannotti, Wetherbee
Assistant Professors Gangaway, Goodworth, Higgins, Leard, Veneri

The Department of Physical Therapy offers a Master of Science in Prosthetics and Orthotics (M.S.P.O.). The National Commission on Orthotic and Prosthetic Education has mandated that all prosthetic and orthotic educational programs be elevated to the master’s-degree level by 2012. The currently accredited Prosthetics and Orthotics Program offered by Newington Prosthetics and Orthotics/Hanger, Inc., has joined with the University of Hartford to offer the M.S.P.O. program. The program has been approved by the State of Connecticut Department of Higher Education.

Professional M.S.P.O. Program
All students must complete a bachelor’s degree and all prerequisite courses before entering the Master of Science in Prosthetics and Orthotics program. Graduates of the program are prepared to participate in the residency program required by NCOPE prior to taking the professional board exam. Graduates are also prepared to meet the intellectual, social, cultural, and economic challenges of our changing healthcare system.
Professional Program Academic Policies

Facilities
The on-campus facilities are located in Charles A. Dana Hall, which is part of the Integrated Science, Engineering, and Technology complex. The department has two Hoffman clinical skills teaching laboratories and one dedicated clinical teaching lab for prosthetics and orthotics. There are three dedicated research laboratories for conducting both faculty research and faculty-mentored student research activities.

These research spaces include a human performance research laboratory for the study of all aspects of human movement as they relate to biomechanical principles; a motor control laboratory with specialized equipment and technology for research into motor control, human movement, and motor learning; and a balance and mobility laboratory for study and research about the interaction of physical variables on human motor control. Balance responses are measured with acceleration, velocity, and position-based sensors to measure muscle activity.

The Hanger facility in Newington, Conn., consists of state-of-the-art educational lecture facilities as well as a full-service fabrication facility for comprehensive custom fabrication of all prosthetic and orthotic designs. These facilities are used by University of Hartford students in the program for all master’s-level specialty courses. Several private-practice prosthetic and orthotic facilities are located in the vicinity. Students in the prosthetics and orthotics program are linked to the clinic through various professional opportunities for clinical experiences. In addition, these clinics serve as a site for integrated student internships.

Off-Campus Clinical Facilities
Integrated internships for the prosthetics and orthotics program are selected on the basis of each facility’s ability to provide supervision by certified professional staff, to offer services to diverse client populations, and compatibility with the University’s and program’s mission and philosophy. The program currently has numerous arrangements with local facilities in the Greater Hartford area. These practice settings include hospital-based inpatient, emergency orthotic management, educational, and outpatient community facilities.

Admission Requirements
A completed application and official transcripts showing evidence of completion of a baccalaureate degree are required for admission. Applicants are responsible for gathering and submitting all required materials by February 1. An undergraduate GPA of 3.0 or higher is required for application consideration.

Applicants must submit the following:
1. Three letters of reference (one must be from a course instructor or academic advisor, one from a supervisor in a professional or other work capacity, and one from another individual in either capacity) and
2. Transcripts for all undergraduate and postgraduate academic work

Selected candidates may be invited for informational interviews prior to admission.

Application Deadline
The priority application deadline is March 1. Rolling admission continue until all seats are filled.

Prerequisites:
1. Biology I and II—8 credits (two courses with lab)
2. Human Anatomy—4 credits (one course with lab)
3. Human Physiology—4 credits (one course with lab)

Note: When Anatomy and Physiology are taken as a combined course, two semesters are necessary (8 credits) to meet the requirements.
4. Chemistry—4 credits (one course with lab)
5. Physics—8 credits (two-course sequence with lab)
6. Human Growth and Development
7. Statistics—3 credits (course to include descriptive statistics, correlation, and introduction to inferential statistics)
8. Trigonometry—3 credits
9. Introduction to Psychology—3 credits
10. Abnormal Psychology—3 credits

All prerequisite courses must be completed with a C (2.0) or better grade. An overall cumulative GPA of 3.0 must be achieved prior to entering the M.S.P.O. program.
Professional Program
Integrated Internships
In addition to the didactic and laboratory course work, students are required to complete three integrated internships successfully. These experiences are arranged by the program and take place in local communities. During these experiences, students are responsible for all clinical education fees ($1,600 per course for MSPO 550, MSPO 551, and MSPO 651). Students are evaluated using a Prosthetic and Orthotic Clinical Performance Instrument. The scores on this form are converted to a Pass/No Pass using the criteria set by the prosthetics and orthotics program. Satisfactory completion of each clinical affiliation is a requirement for obtaining the M.S.P.O. A grade of No Pass for a clinical affiliation constitutes a failure of a professional course.

Academic Standards
Degree candidates must attain an overall grade point average of B (3.0) or higher and must achieve a grade of C (73 percent) or better in all courses throughout the program, as well as display ethical, personal, and professional qualities needed to fulfill the role of an orthotist and prosthetist. Students who fail to complete one course in the program successfully must repeat that course prior to continuing in the program. All courses required for the major, with the exception of clinical experiences, must be taken for a letter grade and may not be taken on a Pass/No Pass basis. Satisfactory completion of the clinical affiliation component is a requirement for obtaining the master’s degree in prosthetics and orthotics.

1. Students are issued a warning letter if their GPA falls below 3.0 in one semester. Students who fail any combination of two courses at any point in the professional curriculum (didactic and/or clinical) are dismissed from the program. For detailed information on all academic policies, please refer to the Student Academic and Clinical Manual.
2. Students will be placed on probation if the following semester GPA again falls below 3.0.
3. Students will have one additional semester to achieve a 3.0 GPA, or they will be dismissed from the program.

Withdrawal and Discontinuance
If a student is failing an integrated internship, the student may be administratively withdrawn at the discretion of the academic coordinator of clinical education or at the request of the clinical instructor. When this occurs, the student fails that clinical experience and another site is pursued. A second failure results in the dismissal of the student from the M.S.P.O. program. Failure in any two graduate-level courses (i.e., two graduate-level courses with a grade of C− or below, or one professional course and one affiliation, or two affiliations) results in dismissal from the program. Should a student demonstrate unsatisfactory professional behavior, a written record is placed in the student’s academic file. Repeated incidents may lead to dismissal from the program.

Curriculum
The M.S.P.O. program is a 59-credit, two-year, full-time program. The schedule of course work is as follows:

**M.S.P.O. I—Summer Semester [9 credits]**
- MSPO 500 Gross Anatomy [2]
- MSPO 501 Gross Anatomy Laboratory [2]
- MSPO 502 Kinesiology [2]
- MSPO 503 Kinesiology Laboratory [1]
- MSPO 504 Clinical Foundations [2]

**M.S.P.O. I—Fall Semester [14 credits]**
- MSPO 511 Transtibial Prosthetics [4]
- MSPO 512 Material Methods in Prosthetics and Orthotics [3]

**M.S.P.O. I—Spring Semester [15 credits]**
- MSPO 520 Scientific Inquiry I [3]
- MSPO 521 Spinal Orthotics [4]
- MSPO 522 Transfemoral Prosthetics [4]
- MSPO 523 Orthopedic Pathology [3]
- MSPO 524 Professional Issues [1]
- MSPO 551 Integrated Internship II [0]

**M.S.P.O. I—Summer Semester**
- MSPO 552 Internship [0]

**M.S.P.O. II—Fall Semester [13 credits]**
- MSPO 600 Scientific Inquiry II [3]
- MSPO 601 Lower-Limb Orthotics II [4]
- MSPO 603 Upper-Limb Orthotics [3]
- MSPO 604 Neuroscience [2]
- MSPO 605 Neuroscience Lab [1]
M.S.P.O. II—Spring Semester [8 credits]
MSPO 610 Prosthetics and Orthotics
   Healthcare Management [2]
MSPO 651 Integrated Internship III [0]
*Select one course, depending on emphasis*:
MSPO 620 Scientific Inquiry [2]
MSPO 621 Advanced Pediatric Exam/Intervention [2]
MSPO 622 Clinical Practice Gerontology [2]
MSPO 623 Prosthetics and Orthotics
   Teaching Assistant [2]

Residency
Upon completion of the degree requirements all graduates are mandated to participate in a post-graduate, two-year residency as a prerequisite for the board certification exams.

Course Descriptions

M.S.P.O. I—Summer Semester
MSPO 500 Gross Anatomy [2] A comprehensive study of the internal and surface anatomy of the human body, with emphasis on the head, neck, trunk, and extremities. The relationships of neural, muscular, vascular, and lymphatic structures are discussed and demonstrated in a regional approach. Small-group problem solving and clinical application of anatomy to physical therapy clinical cases are expected. Corequisite: MSPO 501.

MSPO 501 Gross Anatomy Laboratory [2] This laboratory course is taught in conjunction with MSPO 500. Laboratory and discussion sessions involve human cadaver prossection in an effort to understand gross anatomical components and relationships of all systemic and skeletal systems. Surface palpation, self-paced computer software programs, and analysis of motion at each joint are included. Systems are reviewed based on Gross Anatomy lecture. Laboratory fee. Corequisite: MSPO 500.

MSPO 502 Kinesiology [2] Kinesiology is the study of human movement. This course presents a first-level integration of the mechanical/anatomical/neurological bases of human movement. This subject matter is specifically developed for students in the health professions. An interdisciplinary approach is used, integrating materials from anatomy, biomechanics, physiology, and neuroscience. Human movement is material from anatomy, biomechanics, physiologically studied from the perspective of functional, kinematic, kinetic, and neurological descriptions of single-joint, complex-joint, and multijoint motions. In this regard, topics of gait, posture, and balance receive a special focus. Students work in groups for some course content. Corequisite: MSPO 503.

MSPO 503 Kinesiology Laboratory [1] This course provides students an opportunity to gain experience with various technology-assisted movement-analysis systems. Students learn how to acquire and interpret information from gait analysis, balance and postural measurements, and electromyographic recordings. Included is a discussion of normal and abnormal gait and posture. Laboratory fee. Corequisite: MSPO 502.

MSPO 504 Clinical Foundations [2] This course covers mechanisms of disease, health problems, and commonly occurring diseases. Organ malfunction, genetic aberration, disease, and trauma are emphasized. The affect of environmental interactions on a person’s function in society is discussed. Etiology, clinical course, prognosis, and medical management are presented.

M.S.P.O. I—Fall Semester
MSPO 510 Lower-Limb Orthotics [4] A comprehensive study of the anatomy of the lower leg with a focus on the foot-ankle complex. This region is evaluated for its biomechanical and physical properties to determine the potential for orthotic treatment. Included is detailed discussion of prescription criteria, foot mechanics, AFO variants, and component/design selection. Laboratory fee.

MSPO 511 Transtibial Prosthetics [4] This course familiarizes students with proper patient-management techniques required to fit individuals successfully with any amputation below the knee joint. Focus is on lower-limb anatomy, etiology of amputations, residual-limb management, socket design, fabrication techniques, alignment, and gait training. Laboratory fee.

MSPO 512 Material Methods in Prosthetics and Orthotics [3] An introduction to the materials and equipment used in P&O fabrication. Students gain an understanding of the proper application of materials, with special emphasis on design, selection criteria, processing options, and safety/quality considerations related to orthotic and prosthetic devices. Laboratory fee.
MSPO 513 Biomechanics [2] Biomechanics is a first-level introduction to the mechanical/anatomical bases of human movement. The subject matter is specifically developed for students in the health professions. An interdisciplinary approach is used, integrating material from anatomy, physiology and physics (mechanics). Quantitative and qualitative biomechanical analyses of human movement are studied from the perspective of kinematic and kinetic descriptions of multisegment motion, joint and muscle mechanics, and tissue biomechanical properties. Corequisite: MSPO 514.

MSPO 514 Biomechanics Laboratory [1] This course is designed in conjunction with MSPO 513 to allow students to become intimately familiar with the concepts of biomechanics, the technologies of human measurement, and the application of biomechanical principles in joint-movement analysis. Corequisite: MSPO 513. Laboratory fee.

MSPO 550 Integrated Internship I [0] This is the first of three integrated clinical experiences that take place in clinical environments supervised by an ABC-certified clinician. This experience helps students integrate didactic information with clinical-skills experiences. This course introduces basic clinical and technical skills to the student in the clinical environment and integrates all aspects of P&O learned in the first year of the program. Students participate in a clinical setting and have the ability to collaborate and assist a certified clinician with basic clinical and technical skills. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Internship fee.

M.S.P.O. I—Spring Semester

MSPO 520 Scientific Inquiry I [3] This course provides students with an understanding and appreciation of the nature of research and the scientific process—the ability to locate and critically analyze published materials in the allied health field. Students also have the opportunity to define a problem, select a sampling, design the appropriate research model, and generate a research proposal outline or report that is scholarly and scientifically founded. Students gain an understanding of the methods of epidemiology used to gain sufficient knowledge of the natural characteristics and distribution of disease.

MSPO 521 Spinal Orthotics [4] A review of functional anatomy and neuroanatomy of the spine, as well as a review of common orthopedic disorders, is provided. There are additional detailed discussions on components, design, prescription, and fitting criteria for numerous spinal orthoses currently being applied. Laboratory fee.

MSPO 522 Transfemoral Prosthetics [4] This course familiarizes students with proper patient-management techniques required to fit individuals successfully with any amputation above the knee joint. Focus is on lower-limb anatomy, etiology of amputations, residual-limb management, socket design, fabrication techniques, alignment, and gait training. Laboratory fee. Prerequisite: MSPO 511.

MSPO 523 Orthopedic Pathology [3] A detailed study of orthopedic injuries and disorders. This course integrates the etiology, pathophysiology, clinical findings, clinical course, medical prognosis, and medical/surgical treatment approaches specific to orthopedic disorders in each region of the body. Lectures from physicians (i.e., orthopedic surgeons) are included.

MSPO 524 Professional Issues [1] This course introduces current issues and challenges facing the orthotics and prosthetics industry. Topics include the orthotic-prosthetic practitioner, the ABC code of ethics, P&O professional organizations, the patient-practitioner relationship, documentation, reimbursement issues, and marketing.

MSPO 551 Integrated Internship II [0] This is the second of three integrated clinical experiences that take place in clinical environments supervised by an ABC-certified clinician. This experience helps students integrate didactic information with clinical-skills experiences. The course introduces intermediate clinical and technical skills to students, who participate in a clinical setting and have the ability to collaborate and assist a certified clinician with basic clinical and technical skills. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Internship fee. Prerequisite: MSPO 550.

M.S.P.O. I—Summer Semester

MSPO 552 Internship [0] This course introduces basic clinical and technical skills to students in the clinical environment. Students participate in a clinical setting and have the abil-
ity to collaborate and assist a certified clinician with basic clinical and technical skills. It is expected that students work a full 40-hour week for six weeks with the ABC-certified clinician to develop clinical, time-management, and patient-related skills. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. (240 hours) Internship fee. Prerequisites: MSPO 550 and MSPO 551.

**M.S.P.O. II—Fall Semester**

**MSPO 600 Scientific Inquiry** [3] Students identify faculty research mentors and work in small groups to begin to develop their research question or scholarly project. This course moves students from identification of the research question or scholarly project to literature review and proposal or scholarly project development. Laboratory fee. Prerequisite: MSPO 520.

**MSPO 601 Lower-Limb Orthotics II** [4] A comprehensive study of the anatomy of the lower extremity with a focus on the knee and hip. These regions are evaluated for their biomechanical and physical properties to determine the potential for orthotic treatment. Includes detailed discussion of prescription criteria, joint mechanics, orthotic variants, and component/design selection. Laboratory fee. Prerequisite: MSPO 510.

**MSPO 603 Upper-Limb Orthotics** [3] A review of the functional anatomy of the upper extremity, including the glenohumeral joint, is followed by an introduction to normal movement patterns and various pathologies of the upper extremity. In addition, a detailed discussion of prescription criteria and upper-extremity orthotic design is presented. Laboratory fee.

**MSPO 604 Neuroscience** [2] An introduction to the neurological system with special emphasis on those aspects appropriate to rehabilitation treatments. Basic neuroanatomy/neuropathology is presented, with a discussion of issues that have clinical relevance. Topics include cranial and peripheral nerves, brainstem, midbrain and cortical anatomy, vascular brain anatomy, cellular neurophysiology, spinal reflexes, and basic control system. Prerequisite: MSPO 500. Corequisite: MSPO 605.

**MSPO 605 Neuroscience Laboratory** [1] This neuroscience laboratory course is an adjunct to, and coordinated with, the neuroscience lecture course. The course is designed to reinforce functional neuroanatomy and clinical correlates of neuropathology. Laboratory sessions include class discussion and a variety of active learning activities. Students have access to models of the various parts of the nervous system, large diagrams, and slides. Laboratory fee. Corequisite: MSPO 604.

**M.S.P.O. II—Spring Semester**

**MSPO 651 Integrated Internship III** [0] This is the final of three integrated clinical experiences that take place in clinical environments supervised by an ABC-certified clinician. This experience helps students integrate didactic information with clinical-skills experiences. The course introduces advanced clinical and technical skills to students, who participate in a clinical setting and have the ability to collaborate and assist a certified clinician with basic clinical and technical skills. Students are expected to demonstrate professional behaviors in all interactions with patients, clients, families, caregivers, and other health professionals. Internship fee. Prerequisites: MSPO 550, MSPO 551, and MSPO 552.

**MSPO 610 Prosthetics and Orthotics Healthcare Management** [2] A comprehensive exposure to management principles and concepts with a focus on their roles, applications, and impact in healthcare. Content includes the importance of capital expenditure for equipment needs in P&O compared to central fabrication services, reimbursement in P&O, and developing and managing a materials budget. Opportunities for students to gain cognition and skills in management theory and practice of the prosthetic and orthotic professional are provided.

**MSPO 611 Upper-Limb Prosthetics** [4] This course familiarizes students with the management and fabrication techniques required to fit individuals successfully with upper-limb amputations, including partial hand through forequarter, as well as prosthetic management of individuals with brachial plexus injuries. Focus is on upper-limb anatomy, etiology of amputations, limb management, socket design, fabrication techniques, and training. Both externally powered and conventional devices are covered. Laboratory fee.
Select one course depending on emphasis:

MSPO 620 Scientific Inquiry [2] This course is a continuation of MSPO 600 and moves students through completion of data collection or scholarly project. Students continue to work in groups of four or five with their faculty mentor. Students begin to prepare results for publication or complete the field application of their scholarly project. Laboratory fee. Prerequisites: MSPO 520 and MSPO 600.

MSPO 621 Advanced Pediatric Examination and Intervention [2] A study of examination and intervention approaches for children with diagnoses/conditions resulting in functional movement impairment. This course emphasizes normal development as well as medical, neurological, and orthopedic considerations specific to pediatric disorders. Integration of clinical assessment tools and major theoretical approaches for the intervention of children is stressed. Psychosocial and developmental considerations specific to children and families are incorporated into all aspects of the course.

MSPO 622 Clinical Practice Gerontology [2] A study of the aging process and developmental tasks of later life. This course focuses on the biological, physical, social, psychological, cultural, and ethical issues associated with aging. Preventive healthcare models, community resources, and interdisciplinary and cross-cultural approaches in gerontology are included. Theoretical models of social gerontology and the aging process are presented.

MSPO 623 Prosthetics and Orthotics Teaching Assistant [2] This course is designed for the student with the desire to explore educational opportunities within orthotics and prosthetics. The student collaborates with one of the core instructors to complete objectives to receive course credit.