PHYSICAL THERAPY PROGRAM
DOCTOR OF PHYSICAL THERAPY (DPT) COURSES 2011-12

Entry Level DPT

FIRST YEAR, Summer Semester

DPTR 5001  Clinical Anatomy I  5.0 cr.
N. Bookstein, PT, EdD; D. James, PT, DPT, OCS, CSCS. Prereq: matriculation in entry-level Physical Therapy Program.
A regional approach to the in-depth study of structural and functional anatomy of the musculoskeletal, vascular, and nervous systems of the appendicular skeleton, body walls, thorax and head and neck. Cross sectional and radiographical anatomy is included. Soft tissue palpation is emphasized.

DPTR 5002  Foundations in PT  2.0 cr.
J. Rodriguez, PT, MHS
Introduction to foundational elements of physical therapy, including movement, patient/client centered care, professionalism, and evidence-based practice.

DPTR 5003  Histology  2.0 cr.
K. Maluf, PT, PhD; A. Nordon-Craft, PT, DSc
Study of cells and tissues of the human body with emphasis on normal function followed by the tissue/structure response in disease, injury and repair. Emphasis on integument, nerve, and musculoskeletal structures, including basic mechanical properties of the latter.

DPTR 5111  Exercise Science  2.0 cr.
E. Melanson, PhD
Discussion of the effect of exercise on physiologic systems, including measurement of exercise capacity in the clinic and laboratory and the effect of exercise on cardiovascular and pulmonary performance.

DPTR 5201  Clin Skills: Exam/Eval I  1.0 cr.
D. Stelzner, PT, MBA
Introduction to the process of obtaining a history, performing a systems review and selecting and administering tests and measures to gather data about the patient. Beginning of the examination process with an overview of the patient's functional ability. Introduction to psychometric properties of tests and measures.

FIRST YEAR, Fall Semester

DPTR 5101  Movement Science I  3.0 cr.
C. Christiansen, PT, PhD  Prereq: DPTR 5001.
Investigation of movement science with emphasis on foundational biomechanical principles related to human posture and movement. Qualitative and quantitative movement analysis is presented with emphasis on clinical application.

DPTR 5141  Human Growth/Development  2.0 cr.
L. Dannemiller, PT, DSc, PCS
Functional movement across the life span. Emphasis on periods of greatest changes in motor behavior. Exploration of factors influencing functional movement, including developmental changes in body systems, physical fitness and activity level. Analysis of movement throughout the life span.

DPTR 5151  Motor Control/Learning  2.0 cr.
J. Valvano, PT, PhD
Application of current principles of motor learning and motor control to activity-focused physical therapy interventions. Emphasis on variables related to task composition and schedule, the environment, and augmented information that enhance practice of motor skills.

DPTR 5161  Psychosoc Aspects Care I  1.0 cr.
D. Stelzner, PT, MBA
Principles of human interaction beginning with discussion of one’s self followed by clarification of the dynamics involved in professional-patient caring relationships. Emphasis on self concept, compassion, caring, honesty, suffering, and what it means to be ill.

DPTR 5202  Clin Skills: Exam/Eval II  2.0 cr.
D. Stelzner, PT, MBA  Prereq: DPTR 5001, DPTR 5201.
Continuation of examination process including advanced movement tests. Progression to dynamic process of making clinical judgments based on data gathered from the examination. Introduction of the process of diagnosis by organizing into defined syndromes or categories of examination results.
DPTR 5203  Clin Skills Ther Interv 4.0 cr.
S. Jordan, PT, MA
Introduction to therapeutic intervention skills, such as basic mobility with and without assistive devices, posture and positioning, therapeutic exercise principles and techniques, soft tissue mobilization, therapeutic modalities, for improving functional mobility and for managing a variety of clinical problems.

DPTR 5601  Scientific Inquiry I 1.0 cr.
J. Hebert, PT, MS
Course designed to introduce students to concepts and approaches to evidence-based practice including effective searching and reviewing literature materials. Observational study designs (cohort, case-control, and cross-sectional) covered, including evaluative tests and measures for diagnostic tests.

DPTR 5721  Educational Methods 1.0 cr.
M.J. Rapport, PT, PhD
Application of learning theories and teaching strategies to clinical practice, individual patients and populations. Emphasis on patient/client and family education, including home programs, clinical teaching, and educational presentations in clinic and community settings.

FIRST YEAR, Spring Semester

DPTR 5006  Physiology 2.0 cr.
C. Sladek, PhD; TBD
Fundamentals of human physiology from basic cellular processes such as membrane support, to the organization and control of organ systems.

DPTR 5011  Neuroscience 3.0 cr.
R. Gisbert, MSPT
Principles of neurophysiology and neuroanatomy introduced. Blood supply, three dimensional topography of the nervous system, sensory and motor tracks of the spinal cord and brainstem, major structures and functions of the diencephalon and cortex are included. Functional correlates are discussed.

DPTR 5162  Psychosoc Aspect Care II 2.0 cr.
D. Stelzner, PT, MBA  Prereq: DPTR 5161.
Continuation of values and caring. Issues related to: health behaviors; grief, mourning and loss; suicide; body image and sexuality; cultural awareness; depression; chronic pain and the diversity in pain management approaches; spirituality and healing; ethical principles, ethical reasoning using case analysis. Ethical reasoning and analysis in an interprofessional small group.

DPTR 5301  Medical Conditions I 2.0 cr.
TBD  Prereq: DPTR 5111.
Pathology and physical therapy management of individuals with cardiovascular, pulmonary, gastrointestinal, genitourinary, and metabolic disorders across the life span. Exercise testing/training, EKG interpretation, cardiac and pulmonary assessment and intervention, medical management, and implications for physical therapy are emphasized.

DPTR 5401  Musculoskeletal Cond I 3.0 cr.
P. Mintken, PT, MS, DPT, OCS
Orthopaedic pathokinesiology of the upper extremity across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of upper extremity orthopaedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.

DPTR 5611  Patient Care Seminar I 2.0 cr.
T. Struassel, PT; DPT, OCS, MTC; M. Schenkmann, PT, PhD, FAPTA  Prereq: DPTR 5001, DPTR 5003, DPTR 5141.
Critical thinking and clinical decision making skills. Application of clinical decision making frameworks and models for clinical practice. Patients with conditions across the life span emphasized.

DPTR 5931  Clinical Education I 2.0 cr.
J. Rodriguez, PT, MHS
Four week full-time supervised clinical experience. Professional values and behaviors developed, relevant questions raised, knowledge applied, clinical skills practiced.

SECOND YEAR, Summer Semester

DPTR 6002  Clinical Anatomy II 3.0 cr.
N. Bookstein, PT, EDD  Prereq: DPTR 5001, DPTR 5101, DPTR 5011.
A regional approach to in-depth study of structural and functional anatomy of the musculoskeletal, vascular, lymphatic, and nervous systems of the axial skeleton, abdomen and pelvis with specific emphasis on the spine and peripheral joints. Abdominal and pelvic viscera are included. Cross sectional and radiographical anatomy is emphasized.
### SECOND YEAR, Fall Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DPTR 6102</td>
<td>Movement Science II</td>
<td>1.0 cr.</td>
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<tr>
<td>C. Christiansen, PT, PhD</td>
<td>Prereq: DPTR 5001, DPTR 5101.</td>
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<tr>
<td></td>
<td>Continued investigation and application of movement science in physical therapy practice with emphasis on age-associated changes in movement, qualitative and quantitative movement analysis, and tests and measures of functional activity.</td>
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<tr>
<td>DPTR 6402</td>
<td>Musculoskeletal Cond II</td>
<td>3.0 cr.</td>
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<tr>
<td>P. Mintken, PT, MS, DPT, OCS</td>
<td>Prereq: DPTR 5001, DPTR 5401.</td>
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<td></td>
<td>Orthopaedic pathokinesiology of the lower extremity across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of lower extremity orthopedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.</td>
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<tr>
<td>DPTR 6501</td>
<td>Neuromuscular Cond I</td>
<td>3.0 cr.</td>
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<td></td>
<td>Frameworks and models used to analyze interrelationships of neuropathology, impairments, and functional loss with neurological conditions across the life span (e.g. multiple sclerosis, lower motor neuron diseases, stroke). Neuropathology presented. Implications for examination, and evaluation (including prognosis, diagnosis, and goals) analyzed.</td>
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<tr>
<td>DPTR 6701</td>
<td>Professional Topics I: Doctoring Profession</td>
<td>1.0 cr.</td>
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<tr>
<td>M.J. Rapport, PT, PhD; D. Steilzner, PT, MBA</td>
<td>Prereq: DPTR 5002.</td>
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<td>Exploration of professional issues including the role of the physical therapist on a healthcare team, physical therapy as a doctoring profession, professional core values and scope of practice, and connection with the APTA as our professional organization. Introduction to legislation and advocacy in healthcare, cultural competence, and professional growth are included.</td>
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### SECOND YEAR, Spring Semester

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<tr>
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<tbody>
<tr>
<td>DPTR 6205</td>
<td>Clin Skills: Pros/Orthos</td>
<td>1.0 cr.</td>
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<tr>
<td>C. Johnson, PT, CHT; C. Christiansen, PT, PhD</td>
<td>Prereq: DPTR 5401, DPTR 6402, DPTR 6501. Coreq: DPTR 6403, DPTR 6502.</td>
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<td></td>
<td>Examination and management of patients with common upper and lower extremity amputations. Principles of evaluation and prescription of upper/lower extremity prostheses and lower extremity/spinal orthoses for individuals across the lifespan in physical therapy clinical practice.</td>
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<tr>
<td>DPTR 6403</td>
<td>Musculoskeletal Cond III</td>
<td>4.0 cr.</td>
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<tr>
<td>P. Mintken, PT, MS, DPT, OCS</td>
<td>Prereq: DPTR 5401, DPTR 6402.</td>
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<tr>
<td></td>
<td>Orthopaedic pathokinesiology of the spine across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of spinal orthopedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.</td>
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<tr>
<td>DPTR 6502</td>
<td>Neuromuscular Cond II</td>
<td>3.0 cr.</td>
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<td></td>
<td>Principles of PT management for individuals with neurological conditions across the life span. Clinical decision making and clinical skills for examination, evaluation, and intervention with individuals with a variety of neurological disorders (e.g., spinal cord injury, Parkinson’s, vestibular pathology) emphasized.</td>
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<tr>
<td>DPTR 6602</td>
<td>Scientific Inquiry II</td>
<td>2.0 cr.</td>
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<td>J. Hebert, PT, MS</td>
<td>Prereq: DPTR 5601.</td>
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<td>Experimental and quasi-experimental study designs (group and single subject) with delineation of the application and analysis of appropriate test statistics (parametric and non-parametric). Survey and qualitative research approaches presented. Application of evidence-based practice continued.</td>
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<tr>
<td>DPTR 6612</td>
<td>Patient Care Seminar II</td>
<td>1.0 cr.</td>
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<td>T. Struessel, PT, DPT, OCS, MTC</td>
<td>Prereq: DPTR 5611.</td>
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<td>Development of critical thinking and clinical decision making skills continued. Differential diagnosis, management of individuals with complex diagnoses and disorders affecting multiple systems across the life span. Social and emotional disability, participation in leisure, work and family activities emphasized.</td>
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<tr>
<td>DPTR 6911</td>
<td>Field Work I</td>
<td>1.0 cr.</td>
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<td>J. Rodriguez, PT, MHS</td>
<td>Prereq: DPTR 5161.</td>
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<td>Approximately one day per week in clinical settings during the fall semester to continue to develop and apply the knowledge, skills, and behaviors learned in the classroom to real situations working with patients and clients.</td>
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<td>DPTR 6121</td>
<td>Pharmacology</td>
<td>1.0 cr.</td>
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<td>R. Page, PharmD; T. French, PhD</td>
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Online course designed to help the learner utilize pharmacological information in planning patient care. Principles of pharmacodynamics and pharmacokinetics precede information regarding mechanisms of action, adverse effects, implications for exercise and other physical therapy interventions for different drug classes included.

**DPTR 6302  Medical Conditions II**  
TBD  Prereq: DPTR 5111, DPTR 5301. 
Pathology and physical therapy management of individuals with oncologic, bariatric, rheumatologic, integument, and psychiatric disorders across the life span. Differential diagnosis, screening, and referral to appropriate personnel will be addressed.

**DPTR 6503  Neuromuscular Cond III**  
L. Dannemiller, PT, DSc, PCS  Prereq: DPTR 6502. 
Principles of PT management for individuals with neurological conditions continued. Refinement of clinical decision making and therapeutic skills for pediatric conditions and individuals with disorders such as Alzheimer’s and traumatic brain injury. Home, school and community participation as well as quality of life are emphasized.

**DPTR 6603  Scientific Inquiry III**  
J. Hebert, PT, MS  Prereq: DPTR 6602. 
Methods of scientific inquiry and evidence-based practice to analysis of patient care for patients with a variety of conditions and diagnoses applied. Evidence for use of measures and intervention approaches emphasized.

**DPTR 6702  Professional Topics II: Differential Diagnosis in Practice**  
Differential diagnosis in primary care physical therapy within a collaborative healthcare model. Synthesis of critical thinking and clinical decision making for efficient screening/examination to determine the need for referral to other health providers, for physical therapy management, or both.

**DPTR 6912  Field Work II**  
J. Rodriguez, PT, MHS  Prereq: DPTR 6911. 
Exploration of issues surrounding access to health care, with an emphasis on underserved populations and persons who have limited access. Service project included.

**DPTR 6932  Clinical Education II**  
J. Rodriguez, PT, MHS  Prereq: DPTR 6912. 
Eight week full-time supervised clinical experience. Experience emphasizes students beginning to make the transition from student or “aide” to taking on the responsibility of the professional physical therapist.

**THIRD YEAR, Summer Semester**

**DPTR 7112  Applied Exercise Science**  
J. Stevens-Lapsley, PT, PhD  Prereq: DPTR 5111, DPTR 5301, DPTR 6302. 
Complex patients with multi-system disease emphasized. Differential diagnosis, screening and referral to appropriate personnel. Physical therapy management principles of complex medical patients, including exercise prescription, biomechanical principles, and chronic disability issues.

**DPTR 7212  Elective**  
PT Core and Clinical Faculty 
Various topics; provides students with the opportunity to explore selected topics, related to clinical practice, in depth or topics that are outside of the scope of the set curriculum.

**DPTR 7604  Scientific Inquiry IV**  
J. Stevens-Lapsley, PT, PhD  Prereq: DPTR 6603. 
Advanced evaluation of the scientific literature encompassing a diverse selection of research types and designs applied to a variety of patient conditions. Evidence-based practice project completed. Measures and interventions for patients with specific clinical conditions and diagnoses proposed.

**DPTR 7703  Leadership in Practice**  
M.J. Rapport, PT, PhD  Prereq: DPTR 6702. 
Role of leaders and concepts of leadership in physical therapy and health care settings and on teams are discussed. Leadership styles and perspectives, and differences between leadership and management are explored. Resume development, mentoring, and professional development and planning are included.

**DPTR 7711  Health Care Delivery**  
T. Struessel, PT, DPT, OCS, MTC 
Health care systems are reviewed for diverse settings. Topics include health policy and reform, insurance, coding/billing, business, human resources, case and risk management, licensure, advocacy, supervision issues and interview preparation. Also includes a comparison of the US healthcare systems and other nations.

**DPTR 7731  Compl/Alternative Med**  
1.0 cr.
S. Jordan, PT, MA
Introduction to the major concepts and issues related to complementary and alternative medicine (CAM).
Discussions related to incorporating evidence based CAM for effective patient centered care across the life span.

**DPTR 7741  Special Practice Settings  2.0 cr.**
L. Dannemiller, PT, DSc, PCS; C. Johnson, PT, CHT; A. Nordon-Craft, PT, DSc
Exploration of physical therapist’s unique roles in a variety of practice settings, including, but not limited to:
occupational medicine, geriatrics, pediatrics, assisted living, home care, and end-of-life care. Legal issues such as
Individuals with Disabilities Education Improvement Act and abuse/neglect topics will be discussed.

### THIRD YEAR, Fall Semester

**DPTR 7131  Radiology  1.0 cr.**
D. James, PT, DPT, OCS, CSCS  Prereq: DPTR 6403
Study of the application and integration of diagnostic imaging to physical therapy clinical decision making.
Provides the physical therapy student with the background to understand diagnostic imaging technology, indication,
evaluative value and limitations. Musculoskeletal pathology emphasized.

**DPTR 7613  Patient Care Seminar III  2.0 cr.**
T. Struessel, PT, DPT, OCS, MTC  Prereq: DPTR 6612.
Critical thinking and clinical decision making skill development continued and applied to patients from Clinical
Education III, across the life span. Writing for publication and presentation skills also emphasized.

**DPTR 7751  Health Promotion  2.0 cr.**
E. Melanson, PhD; C. Figuers, PT, EdD; C. Jankowski, PhD  Prereq: DPTR 7112
Critiquing/designing fitness, wellness and nutrition programs that are appropriate for physical therapy for well
populations and people with disabilities across the life span. Focus is on the well elderly and populations with obesity,
coronary heart disease, diabetes and cancer.

**DPTR 7933  Clinical Education III  8.0 cr.**
J. Rodriguez, PT, MHS  Prereq: DPTR 6932.
Sixteen week full-time supervised clinical experience. Exploration of general or specialty areas of physical
therapy practice. Skills developed throughout earlier experiences demonstrated as entry-level competency in physical
therapy practice by the end of this experience.

### THIRD YEAR, Spring Semester

**DPTR 7934  Clinical Education IV  8.0 cr.**
J. Rodriguez, PT, MHS  Prereq: DPTR 7933
Sixteen week full-time supervised clinical experience. Full preparation of students to transition to the work
force. Publishable case report prepared by the end of this experience, which is linked to DPTR 7613.

**Independent Study  1.0-3.0 cr.**
PT Faculty
An Independent Study option is available each semester. This course provides students with an opportunity to
pursue content of their own choosing under guidance of a faculty mentor.

### TRANSITION DPT

**DPTR 8004  Applied Histology  1.0 cr.**
R. O’Hara, MS, PT
This course provides the opportunity for students to learn about histology and concepts of tissue healing as
applied to clinical physical therapy practice.

**DPTR 8111  Evidence-Based Practice  3.0 cr.**
K. Maluf, PT, PhD  Prereq: Research knowledge base/course work.
Introduction to principles of evidence-based practice. Application of evidence-based principles to prognosis,
diagnosis, and intervention in physical therapy practice. Focus on finding and critically appraising evidence for physical
therapy interventions.

**DPTR 8112  Professional Development  2.0 cr.**
M.J. Rapport, PT, PhD
Exploration of professional issues including the role of the physical therapist on a healthcare team, physical therapy as a doctoring profession, professional core values and scope of practice, and connection with the APTA as our professional organization. Introduction to legislation and advocacy in health care, cultural competence, and professional development and planning are included. Role of leaders and concepts of leadership in physical therapy and health care settings and on teams are discussed. Leadership styles and perspectives, and differences between leadership and management are explored.

**DPTR 8152  Motor Control Learning**  
J. Valvano, PT, PhD  
Current concepts in motor control and motor learning relevant to physical therapy practice are reviewed through guided independent study and online tutorials. Emphasis is on updating the theoretical base required for application of these concepts to clinical practice.

**DPTR 8211  Patient Care Seminar I**  
M. Schenkman, PT, PhD  Prereq: DPTR 8111.  
Critical thinking and clinical decision making skills. Application of clinical decision making frameworks and models for clinical practice. Patients with musculoskeletal, neuromuscular, and medical conditions across the life span emphasized.

**DPTR 8212  Radiology**  
D. James, PT, DPT, OCS, CSCS  
Application and integration of diagnostic imaging to physical therapy clinical decision making. Students learn to interpret and evaluate pertinent diagnostic imaging studies and recognize when it may be appropriate to refer patients for further testing. Musculoskeletal pathology emphasized.

**DPTR 8213  Health Promotion**  
E. Melanson, PhD  
Critiquing and designing fitness, wellness, and nutrition programs that are appropriate for physical therapy for well populations and people with disabilities. Focus on the well elderly and populations with obesity, coronary heart disease, diabetes, and cancer.

**DPTR 8312  Patient Care Seminar II**  
M. Schenkman, PT, PhD  Prereq: DPTR 8211.  
Seminar providing students with opportunities to refine critical thinking and clinical decision making skills and to integrate critical issues related to physical therapy care of complex patients. Written and oral presentation of case content emphasized.

**DPTR 8313  Pharmacology**  
R. Page, PharmD; T. French, PhD  
Online course designed to help the learner utilize pharmacological information in planning patient care. Principles of pharmacodynamics and pharmacokinetics, information regarding mechanisms of action, adverse effects, implications for exercise and other physical therapy interventions for different drug classes included.

**DPTR 8314  Differential Diagnosis**  
S. Jordan, PT, MA  
This online course encompasses differential diagnosis in primary care physical therapy within a collaborative healthcare model. Synthesis of critical thinking and clinical decision making for efficient screening/examination to determine the need for referral to other health providers, for physical therapy, or both.

**Independent Study**  
PT Faculty  
An Independent Study option is available each semester. This course provides students with an opportunity to pursue content of their own choosing under guidance of a faculty mentor.