Northeast
College of Health Sciences

2025-2026
GRADUATE CATALOG

ACADEMIC EXCELLENCE
LEADERSHIP
PROFESSIONAL BEST PRACTICES

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President's Message

Welcome to Northeast College of Health Sciences! I am so pleased that you have chosen to pursue a professional education here at Northeast, where you will learn to reimagine health and transform lives – including your own.

This Northeast College Catalog is designed to be a key resource on your academic journey. The Catalog contains important information about Northeast's mission, values, resources, services and academic information, including outlines of each of our programs, related curricula and graduation requirements. There is also key information about Northeast faculty, staff and administration to help you better understand what each person does and how they will support your success.

In short, this handbook provides information that is essential for every student. I encourage you to use it as a key resource in learning about your rights, responsibilities and opportunities while studying at Northeast College.

You have been called to pursue a rewarding career where you will make a positive difference in others' lives. In joining the Northeast community, you have also become part of a proud tradition of outstanding healthcare leadership and professionalism. We're glad you're here, and we look forward to growing with you in the coming trimesters.

Michael A. Mestan, D.C., Ed.D.
President

Preface

The information in this Catalog was prepared as of September 1, 2025, and replaces and supersedes all prior editions. Provisions of this Catalog are not to be regarded as an irrevocable contract between the student and Northeast College of Health Sciences. The College reserves the right to make changes, including without limitation changes to program offerings, course offerings, course and program descriptions, content and requirements, policies, procedures, deadlines, activities, operations, fees, or the announced academic calendar, at any time without notice. It is the responsibility of the individual student to confirm that all appropriate degree requirements are met.

Northeast College of Health Sciences offers an equal educational opportunity to all persons without regard to race, color, gender, age, creed, religion, national origin, ethnic background, citizenship, marital status, familial status, sexual orientation, gender identity, gender expression, disability or veteran status, status as a victim of domestic violence, ancestry, arrest/convictions record, genetic predisposition or "carrier" status, and any other characteristic protected by applicable federal, state, or local law. This policy applies to all matters, including admission and education of students, availability of student loans, grants, scholarships, employment and promotion of teaching and nonteaching personnel, and activities conducted on premises owned or occupied by the College. Married-student housing accommodations are provided in accordance with New York State's statutory recognition of marriage relationships.

Behavior exhibited by faculty, staff, and students must reflect respect for each individual's rights and dignity as a human being. Harassment is contrary to the College's philosophy and is prohibited by federal and state laws.

The College neither condones nor permits any type of harassment that is severe, pervasive, and/or creates a hostile environment that interferes with an employee's work or a student's opportunity to learn. Actions of harassment include, but are not limited to, vulgar or derogatory language or other conduct creating a hostile environment, and threatening language or actions directed against a person because of non-job-related issues such as physical characteristics or sexual orientation. Other types of illegal, discriminatory actions that cause harm to a person – especially with respect to matters such as employment, financial aid, academic or professional performance and/or advancement – will not be tolerated.

All instances of harassment must be reported to the appropriate supervisory person or the office of Human Resources. Such complaints will be fully investigated by officers of the College, or their designees, to achieve an equitable and satisfactory resolution.

The College's Equal Opportunity Officer coordinates all of the College's compliance efforts under Title IX of the Education Amendments of 1972 (regarding sex discrimination), Section 504 of the Rehabilitation Act of 1973 (regarding disability discrimination), the Age Discrimination Act of 1975 (regarding age discrimination), and other applicable federal and state nondiscrimination legislation. The Equal Opportunity Officer's office is in Room 205 of the Administration Building. The telephone number is 315.568.3109.

It is the student's responsibility to become familiar with and follow all regulations of the College. This Catalog, as well as posted notices, are used to inform people of campus governance.

Mission, Values and Institutional Learning Objectives

Mission Statement

Our College is committed to academic excellence, leadership, and professional best practices in the health sciences.

Values

At Northeast College of Health Sciences, we honor our heritage as a chiropractic institution and uphold the following values as a priority in all interactions. We use these tenets as guiding principles within our personal and professional lives.

Belonging: We seek to create a learning and working environment in which all members of our community are welcome and valued. We acknowledge each person's unique experience, perspective, and ability as contributions that both enrich our community and enhance the professions and people we serve.

Inclusion: We dedicate ourselves to fostering a culture that is inclusive and accessible to the diverse needs and experiences of our community members. In order to create an environment in which all members feel valued and appreciated, we actively pursue opportunities to incorporate practices and policies that enhance and honor the vibrancy of these differences.

Respect: We strive to create and maintain an environment that is committed to the ideals of diversity, equity, and inclusion in all interactions. We commit ourselves to honesty, trust, and fairness in all endeavors in alignment with the ethical standards of our professions. We acknowledge our personal responsibility in pursuing these ideals and welcome open dialogue and introspection.

Collaboration: We actively pursue and participate in opportunities to work and learn through interdisciplinary partnerships. We recognize the advantages afforded by effective collaboration and that in doing so, we achieve greater outcomes both individually and collectively. We remain dedicated to the professional success of our alumni and cultivating relationships with our stakeholders to enrich the professions and people we serve.

Learning: We embrace the core principles of an evidence-based health sciences education. We engage in the continual process of lifelong learning, critical self-reflection, demonstrated best practices, and intellectual discourse. We commit ourselves to fostering innovative learning environments that both include and create opportunities for all members to achieve their fullest potential.

Institutional Learning Objectives

As our mission statement outlines, the goal of the Northeast College of Health Sciences is to offer the highest quality education by ensuring that those completing our programs meet the following institutional learning objectives:

1. Develop critical thinking skills using current evidence and practices to make informed decisions;
2. Use information literacy skills to effectively locate, analyze, and integrate information;
3. Demonstrate effective forms of communication;
4. Behave ethically, professionally, and with integrity;
5. Demonstrate the ability to work effectively within a collaborative interprofessional team;
6. Display leadership skills applicable to the field of study;
7. Conduct themselves in a caring and compassionate manner sensitive toward others of all cultures and backgrounds; and
8. Understand the theoretical underpinnings and application of chosen discipline.

Accreditation, Registration, and Certification

Accreditation and Registration

Northeast College of Health Sciences holds an Absolute Charter from the New York State Board of Regents.

Northeast College of Health Sciences' programs are registered by the New York State Education Department.

Northeast College of Health Sciences is accredited by the Middle States Commission on Higher Education, 1007 North Orange Street, 4th Floor, MB #166, Wilmington, Del. 19801 (267.284.5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Middle States Commission on Higher Education (MSCHE) – www.msche.org.

Chiropractic
Seneca Falls Campus: The Doctor of Chiropractic degree program at Northeast College of Health Sciences is awarded programmatic accreditation by The Council on Chiropractic Education, 10105 E. Via Linda, Suite 103 - 3642, Scottsdale, AZ, 85258-4321, Phone: (480) 443-8877, Website: www.cce-usa.org.

Last accreditation affirmation: 2025
Next scheduled comprehensive site visit: 2033
Continuously accredited since: 1979

Long Island Campus: The Doctor of Chiropractic degree program at the additional educational site in Levittown, New York, for Northeast College of Health Sciences is currently engaged in the process of seeking programmatic accreditation. During this application process, the additional educational site does not hold accredited status with the agency, nor does the agency ensure eventual accreditation.

Next scheduled comprehensive site visit: 2026

Northeast College of Health Sciences is an institutional member of the State Authorization Reciprocity Agreement (SARA) Initiative. SARA is a voluntary agreement among its member states and U.S. territories that establishes comparable national standards for interstate offering of postsecondary distance-education courses and programs. Students residing outside New York state who have concerns resulting from distance-education courses offered by Northeast may follow the external complaint process located in the Student Guide.

Documentation of all College accreditations is kept on file in the office of Institutional Effectiveness and Compliance.

Concerns regarding the College's compliance with the standards or its accreditors should be directed to the appropriate agency at their address listed above.

Certifications

Northeast College of Health Sciences is certified by the United States Department of Education to offer the following programs:

Federal Pell Grants
Federal College Work Study Program
Direct Federal Loans
Federal Stafford Loans (formerly GSL)
Veterans Educational Benefits
Vocational Rehabilitation Benefits

Requirements for Licensure – United States

Pursuant to federal regulations 34 CFR § 668.14 and § 668.43, and the requirements of the National Council for State Authorization Reciprocity Agreements (NC SARA), Northeast College of Health Sciences (Northeast) must provide students with up-to-date information regarding whether its licensed profession programs meet state and territory standards allowing graduates to qualify for professional licensure. This information can be found on the College's website under "Consumer Information" in the Licensure Information accordion at the following web address: http://www.northeastcollege.edu/consumer-information

Graduate Programs Catalog

Northeast College of Health Sciences
2360 State Route 89
Seneca Falls, N.Y. 13148

Phone: 800.234.6922

www.northeastcollege.edu

Tuition & Fees

Tuition

Doctor of Chiropractic Program

Chiropractic students who are scheduled for 17 to 28 credit hours will be charged a flat rate of $15,420 per trimester for the 2025-2026 academic year. For students falling above the 17 to 28 credit range, $680 will be added to the flat rate for each credit above 28; for students falling below that range, $680 will be subtracted from the flat rate for each credit below 17. Tuition and fees are subject to adjustments authorized by the Board of Trustees. In such cases, due notice will be given.

Program fees apply.

Online Graduate Programs

Tuition for students in the online graduate programs is $872 per credit hour for the 2025-2026 academic year. A technology fee is associated with the online programs. Students may also incur expenses for books and certain supplies.

Northeast alumni and concurrent students who are currently enrolled in the Doctor of Chiropractic program receive a 20% discount.

Residency Graduate Programs

Tuition for students in the residency graduate programs is $690 per credit hour for the 2025-2026 academic year. There is no general fee or other fees associated with the residency programs; however, students may incur expenses for books and certain supplies.

Northeast alumni receive a 20% discount.

Bachelor of Professional Studies Program

A $1,655 fee will be charged to students who are enrolled in the D.C. degree program who seek to earn the Bachelor of Professional Studies (BPS) degree. This fee covers the tuition for the capstone course required for completion of the BPS degree and other associated administrative costs. No additional charges are associated with obtaining the BPS degree.

Payment Policies

All tuition charges must be paid in full by the date established by the College for each trimester. Students may receive a financial-aid deferment by completing their loan applications and submitting them to the Financial Aid office by the designated deadline. If outstanding charges exist, students will not be allowed to register and will be required to register late upon payment of outstanding tuition and fees, including the appropriate late registration fines.

Northeast partners with Nelnet Campus Commerce to provide electronic payment processing options (ePay) and managed payment plans. This is available via a sign-on initiated on the MyNortheast Portal. Online payments for tuition and fees can be made via Nelnet ePay using a U.S. bank account, debit/credit card, or international payments through Flywire.

Students whose balances are not covered by Financial Aid have the option of paying in monthly installments. The first payment of 25% is due by the 10th of the month following registration, and the next three payments of 25% are due the 10th of the next three consecutive months. Late installment payments will result in a $100 late payment fine and may result in the student being deregistered from classes. Students also have the option of entering into a Nelnet automated payment plan. There is a $25 fee charged by Nelnet each trimester to enroll in their payment plan.

Payments can be made directly to Northeast by U.S. check or cash. Please allow sufficient time if you are mailing a check or money order. When a payment is made directly to Northeast it is applied to the student's overall balance. If a payment plan is in effect with Nelnet, the payment will reduce the overall balance on the payment plan and any remaining balance will be divided among the remaining payment due dates.

Northeast does not accept credit cards directly for payments on student accounts.

Checks and money orders should be made out to Northeast College of Health Sciences. All payments will be deposited upon receipt. Post-dated checks will not be

honored. The College reserves the right to not accept personal checks if there is a history of checks presented with insufficient funds.

In order to be cleared to register each trimester, students must accept the Student Financial Obligation Agreement located on the MyNortheast Portal and have no prior trimester balance on their account.

Student Account Refunds

A student will receive an overpayment refund whenever there is a credit balance reflected on the student account.

Credit balances usually result from proceeds received from grants, scholarships, student loans, and other payments. Student refunds resulting from credit balances are made available to the student within 14 days of either the beginning date of the academic term, or the date in which the credit is generated. Financial aid disbursements or refunds may not be distributed, if the student is not in good academic standing with the College or has an outstanding "I" incomplete grade from a prior academic term. Appeals to the policy may be made to the Financial Aid office.

Refund Upon Withdrawal

Students who withdraw from the College prior to the 60% completion point of a term will have their institutional charges adjusted. Tuition, fees, housing charges, and required meal plans will be prorated based on the percentage of the term completed as of the student's last date of attendance. If a student attends beyond the 60% point of a term, no refund will be made. Students must contact the Center for Student Support to begin the withdrawal process.

Refund Upon Withdrawal From Concurrent Programs

Students who concurrently matriculate in more than one degree program and choose to fully withdraw from one of the programs may be entitled to a tuition refund. The withdrawn program's tuition costs are refunded based on the percentage of the term completed. If a student attends beyond the 60% point of a trimester, no refund will be made.

Withdrawal from individual course(s) results in no refund when it occurs after the drop/add period (refer to the Academic Calendar for deadline). Tuition for an elective course is refunded if the course is dropped before the elective starts.

Return of Title IV Funds

When a Federal Student Aid recipient withdraws from the College, the amount of Title IV funds earned is based upon the percentage of the term completed. For withdrawals on or prior to the 60% point of the trimester, a pro-rata refund calculation determines the amount of student aid a student has earned. After the 60% point of the trimester, a student is entitled to 100% of their student aid.

Return of Federal Student Aid Funds

When a student who withdraws is eligible for a refund of educational expenses or a student requests that awarded funds be reduced, and Federal Financial Aid Funds (Title IV) are involved, the institution must make adjustments or repayments of any credit in the following order:

Federal Direct Unsubsidized Loan
Federal GradPLUS Loan
Other Title IV Student Assistance
Other external Financial Aid programs
Internal Aid
Student

When a student withdraws from the College, any credit balance after reducing internal aid, in excess of tuition and fees, will be returned to the student.

Penalties

The College reserves the right to deny admission or registration to any person who has not paid in full all outstanding financial obligations to the College. Unless the debt has been discharged under the U.S. Bankruptcy Reform Act of 1978, the College may, at its sole discretion,

1. refuse to admit or register the student,
2. cancel the student's registration,
3. bar the student from attending class,
4. remove the student from residence housing, and/or
5. withhold the student's diploma.

FEES (2025-2026 ACADEMIC YEAR)

Fees Per Trimester

General Fee	
1st trimester of D.C. enrollment	$285
Subsequent D.C. trimesters	$240
Technology Fee	$100
Meal Plan (mandatory minimum for students taking 12 or more credits)	
D.C. students in trimesters 1-9 enrolled at Seneca Falls campus	$940*

*8th or 9th trimester students who begin a single long-term clerkship **after** the start of the trimester are eligible for a refund once they begin the clerkship. The refund is calculated at the **lesser** of the prorated percentage of the term assigned to the clerkship or the balance on their meal plan account.

Infirmary Fee (for students taking 12 or more credits)	$50**
D.C. and students enrolled at Seneca Falls campus	

**These fees do not apply to 8th or 9th trimester students participating in a single long-term clerkship resulting in 50% or less of the trimester being spent at the Seneca Falls Health Center.

Other Fees/Deposits

Application Fee (nonrefundable)	$60
New Student Tuition Deposit	$400
ID Card Replacement	$20
Late Tuition Payment Fee	$100
Late Registration Fee	$50
Returned Checks	$25
Housing Contract Release Fee after 1st trimester (through week 12)	$300
Housing Contract Release Fee after 2nd trimester (through week 12)	$250
Housing Contract Release Fee (after week 12)	$350

Housing Fees per Trimester

Single Occupancy Room	$1,660
Double Occupancy Room	$1,245
Married	$3,300
Family	$3,750

Financial Aid Programs

The office of Financial Aid endeavors to assist students in meeting their financial obligations through the aid of scholarships, Federal College Work-Study, grants, and loans. This section outlines the commonly used sources of financial aid, eligibility criteria, and application procedures. The following table, and sections below, lists many of the scholarships, grants, and loans available at Northeast, along with general eligibility criteria and application process.

SOURCES OF FINANCIAL AID AT NORTHEAST COLLEGE OF HEALTH SCIENCES

Grants & Scholarships

Applicable to	Program Name	Description	Award Amount
All degree programs	Federal and N.Y. State Veterans Awards	Veterans who have completed eligible service	Amounts vary
D.C. Program Only	Northeast Merit Scholarships	Scholarships awarded to prospective students; based on previous academic achievement	3.0-3.49 GPA $2,000 3.5-4.0 GPA $3,000 Total for first academic year (two trimesters)
	Presidential Scholarships	Competitive Scholarships	Amounts vary
	Northeast Academic Scholarships	Competitive Cumulative GPA Scholarships awarded to enrolled students in each cohort class of Trimesters 2-9. Competitive Term GPA Scholarships awarded to enrolled students in each cohort class of Trimesters 2-7.	Up to $500 per trimester
	Northeast International Scholarships	Competitive Scholarships awarded to enrolled nonresident alien students who are classified as Trimester 2 or higher; a Northeast minimum GPA of 3.0 and essay required	Up to $500 per trimester Up to $1,500 maximum per award year
	Northeast Education Opportunity Awards	Competitive Awards for enrolled students who have a Northeast minimum GPA of 3.0; financial need and essay considered	Up to $500 per trimester Up to $1,500 maximum per award year
	Northeast Endowed Scholarships	Competitive Scholarships awarded to enrolled students; details available in Financial Aid office	Award amounts vary

Loan Programs

Applicable to	Program	Academic Year Maximum	Interest	Eligibility	Application
All degree programs	Federal Direct Unsubsidized Loan	Master's degree programs: $20,500; D.C. program: May be awarded up to $33,000	2025-2026 Fixed rate 7.94%	Financial need	FAFSA Form, Master Promissory Note
	Graduate PLUS Loan	May be awarded up to student budget less other aid	2025-2026 Fixed rate 8.94%	Credit worthy	FAFSA Form
	U.S. and International Student Private Loans	Amounts vary	Vary by loan program	Vary by loan program	Contact the Financial Aid office for information

Employment

Applicable To	Program	Annual Maximum	Eligibility	Application
All degree programs	Federal Work Study	Varies according to work load and unmet need	Financial need	Financial Aid Form and Northeast Application

COST OF ATTENDANCE

Eligibility for financial aid is determined by a student's financial need and the costs associated with attending the institution, called the "cost of attendance" (COA). The components of a student's COA include direct educational costs (tuition, fees, books, and supplies) and indirect costs (housing and food, personal expenses, and transportation) as prescribed by the U.S. Department of Education. A student cannot receive financial aid funding in excess of their total COA.

Student Expense Budgets 2025-2026

*Expense	24-Month M.S. Programs	16-Month M.S. in ACN Program	D.C. Program Seneca Falls On-Campus Trimesters 1-4	D.C. Program Seneca Falls Off-Campus Trimesters 1-4
Tuition	$10,464	$15,696	$30,840	$30,840
Fees	$200	$200	$780	$780
Books & Supplies	$1,050	$1,576	$1,500	$1,500
Room & Board	$9,640	$9,640	$7,320	$9,640
Transportation	$2,000	$2,000	$2,000	$2,000
Personal	$1,500	$1,500	$1,500	$1,500
Loan Fees	$216	$216	$600	$600
Total	$25,070	$30,828	$44,540	$46,860

*Expense	D.C. Program Levittown Campus Trimesters 1-4	Seneca Falls On-Campus Trimesters 5-10	Seneca Falls Off-Campus Trimesters 5-10	Off-Campus/Levittown Health Centers Trimesters 5-10
Tuition	$30,840	$30,840	$30,840	$30,840
Fees	$680	$780	$780	$680
Books & Supplies	$1,500	$1,500	$1,500	$1,500
Room & Board	$11,328	$7,320	$9,640	$11,328
Transportation	$2,464	$2,000	$2,000	$2,464
Personal	$1,680	$1,500	$1,500	$1,680
Licensing Board Fees		$1,420	$1,420	$1,420
Loan Fees	$600	$600	$600	$600
Total	$49,092	$45,960	$48,280	$50,512

*These estimated expenses represent two trimesters (one academic year/eight-month period) and may vary due to modest cost increases or individual student factors. Estimated professional licensing board exam fees (totaling $4,260) is added to student budgets when those costs are normally incurred. Living expense items may be adjusted for students relocating to the school's off-campus health centers or other clinical rotation sites. Students can request a student cost of attendance (COA) increase for dependent care expenses. Students should consult the Northeast College Financial Aid office to request a review any costs not covered by the student COA listed within their financial aid offer.

This financial aid information reflects data available at the time of this publication. Changes in state and federal regulations and/or school policy may affect student costs and financial aid program eligibility. Current information regarding terms, funding levels and eligibility regulations may be requested from the Northeast Financial Aid office.

FINANCIAL AID APPLICATION PROCESS

All U.S. students who wish to be considered for federal financial aid program funding must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA application can be found online at https://studentaid.gov. Include the college code of 012277.

For students requesting to cover all or part of their educational expenses utilizing federal financial aid programs, and/or other aid program funding sources, the College recommends they adhere to the following financial aid application processing schedule.

Six months prior to academic year start date

Complete Free Application for Federal Student Aid (FAFSA) at https://studentaid.gov

Provide the Financial Aid office with documentation of any possible financial aid program eligibility: Veterans, Military Service Member, Vocational and Educational Services, scholarships, etc.

Three months prior to academic year start date

Accept or modify Northeast financial aid offer on the Northeast Student Portal

Two months prior to academic year start date

Complete student loan promissory note at https://studentaid.gov

Complete student Loan Entrance Counseling at https://studentaid.gov

One month prior to academic year start date

Review loan disbursement notice provided in the student's Northeast email account

GENERAL ELIGIBILITY GUIDELINES

Citizenship

To receive funds from federal programs, you must be a U.S. citizen or eligible noncitizen. An eligible noncitizen should have an eight- or nine-digit Alien Registration Number and belong to one of the following categories:

- U.S. permanent resident with an Alien Registration Receipt Card (I-151 or I-551);
- other eligible noncitizen with a Departure Record (I-94) from the U.S. Immigration and Naturalization Service showing any one of the following designations: (a) Refugee, (b) Asylum Granted, (c) Indefinite Parole and/or Humanitarian Parole, or (d) Cuban-Haitian Entrant; or
- other eligible noncitizen with a temporary residency card (I-688).

Those in the U.S. on only an F1, F2, or M-1 student visa, only a J1 or J2, B1 or B2 (exchange) visitor visa, a G, H, or L series visa, are not eligible for Federal or State Aid. Also, anyone with only a "Notice of Approval to Apply for Permanent Residence" (I-171 or I-464) cannot receive Federal Financial Aid Funds.

Status of Prior Loans

A student is not eligible to receive federal financial aid if in default on any federal educational loans previously borrowed. Also, a student must not have liens on their property due to debt owed to any federal agency.

Dependency Status

Students enrolled in any of Northeast's graduate and professional degree programs are considered to be independent students for the purpose of applying for Federal Student Aid Programs. Parental information is not required to be reported on the Free Application for Federal Student Aid (FAFSA).

Satisfactory Academic Progress – New York State Financial Aid

Students are expected to be making satisfactory progress in their course of study to be able to participate in the State Student Financial Assistance Program. The following chart outlines the minimum requirements for financial aid eligibility at each level of study for all students.

Doctor of Chiropractic Program

Before being certified for this payment	A student must have accrued a minimum of	With a cumulative index of at least
1	0 credits	0.00
2	18 credits	1.50
3	36 credits	2.00
4	55 credits	2.00
5	75 credits	2.00
6	95 credits	2.00
7	120 credits	2.00
8	145 credits	2.00
9	165 credits	2.00
10	185 credits	2.00

Students who fail to meet these standards and become ineligible to receive New York State financial aid may have their eligibility reinstated by one of the following methods:

- make up a deficiency without benefit of state support,
- be readmitted to the institution after an absence of at least one calendar year by meeting the institution's academic requirements, or
- transfer to another institution where the student must meet the new institution's admission requirements.

Satisfactory Academic Progress for Federal Financial Aid Eligibility and Academic Standing

The college and the federal financial aid programs require that a student maintain a minimum level of academic progress in order to remain enrolled and eligible to receive financial aid funds. This progress is monitored through qualitative and program completion pace measures, which are calculated at the end of each academic term.

Standards of Academic Progress

A student must meet the following academic measures in order to remain in good academic standing with the college, and to continue to meet the U.S. Department of Education's eligibility requirements for Federal Student Aid. These measures apply to students matriculating in all Northeast degree programs:

a. A student must achieve a cumulative GPA of 1.5 or better in their first trimester.

b. At the end of a student's second trimester of enrollment, and thereafter, a cumulative GPA of 2.0 or higher must be earned.

c. A student must successfully complete a course that is being repeated after earning a grade of F, XF, or WF.

d. Pace of program completion: To ensure a reasonable pace, a student must have successfully completed a minimum percentage of their cumulative attempted credit hours at the end of each term. An earned course grade of I, F, XF, WF, or W is not considered to be successful completion of a course. Any credit hours, from accepted transfer courses, are included in the pace calculation as credit hours earned and attempted.

How the program pace (completion rate) is determined:

$$\frac{\text{Cumulative number of credit hours successfully completed}}{\text{Cumulative number of attempted credit hours}}$$

Required minimum program pace percentages:

35%	during first trimester of enrollment
35%	during second trimester of enrollment
50%	during third trimester of enrollment
67%	during fourth, and all subsequent, trimesters of enrollment

The maximum length of time to complete an academic program is 150% of the program's total credit hours.

Academic Warning

A student in academic warning status has failed to meet the minimum requirements of the college's standards of academic progress, and must meet the minimum standards by the end of the next trimester of enrollment. U.S. Department of Education regulations state that a student in academic warning status may only receive federal student aid for one additional term before being required to meet the standards of academic progress to

maintain their eligibility for funds. The student should meet with the Center for Student Support during the trimester to assess academic progress and receive assistance in developing effective learning strategies.

Academic Dismissal

A student is academically dismissed from their program of study if they have not met the standards of academic progress within one trimester immediately following a term of academic warning status, or is unsuccessful in their probation appeal attempt.

Probation

A student who has been academically dismissed may appeal to be placed in a probation status. Approval of the probation status allows the student to continue in their program, and reinstates federal financial aid eligibility for one trimester. Appeals will be considered by the college within guidelines set by the U.S. Department of Education (DOE). DOE guidelines stipulate that the student must explain the special circumstance that caused them to fail to meet the minimum standards of academic progress, and the student must also explain what has changed that would now allow the student to regain good academic standing.

Academic Plan

In some circumstances, a student may be placed on an academic plan where stated objectives must be met for the student to get back in good academic standing by a set point in time. Students who have been placed on an academic plan must meet the modified standards of academic progress outlined in the plan, or they will be academically dismissed. While on the academic plan a student's financial aid eligibility is reinstated.

Good Academic Standing

The status of good academic standing is defined as any student who is allowed to register for and perform academic course work at the college during any given trimester. A student who, after academic review, has attained a status of Academic Warning or Academic Probation is considered to be in good academic standing. Failure to maintain good academic standing could result in the loss of financial aid eligibility and/or dismissal from the program.

Financial Aid Offer

Prior to beginning enrollment at Northeast, and each academic year following, students will receive an offer notice from the Financial Aid office. This notice discloses the student's estimated cost of attendance for the student's upcoming academic year and a financial aid offer to assist in covering the expenses. At the time of the offer notice, a student has an opportunity to accept, reduce, or decline the financial aid offer. Students are required to actively accept their financial aid offer within their MyNortheast Portal. Financial aid offers can be viewed and modified through the My Financial Aid Portal.

Private (Personal) Loan Applicants

Each loan program period may require separate loan applications. Students should contact the Financial Aid office for information regarding the appropriate application process and selecting a lender.

Since Northeast is on a trimester schedule, two trimesters (eight months) equal one academic year for loan purposes. Loan applications should be submitted approximately three months prior to the academic period. Students are notified of submission dates by the Financial Aid office.

Scholarships and Grants

Scholarship opportunities available to Northeast students are listed on the MyNortheast Portal. Awards vary as to the amount and the criteria for eligibility. Scholarship program opportunities come from within and outside the College. Here are a few examples of scholarship and grant programs Northeast students have benefited from:

Dr. Kenneth W. Padgett/Alumni Scholarship

Don & Kay Allen International Scholarship

International Chiropractors Association Auxiliary Scholarship

Chiropractic Education Foundation of New York Scholarship

New York State Financial Aid Administrators Association Scholarship

Dr. Lillian M. Ford Scholarship

Association of New Jersey Chiropractors Scholarship

Dr. Marvin B. Sosnik Scholarship

Dr. Jack DiBenedetto Memorial Scholarship

Dr. Arnold (Mickey) and Lucille Goldschmidt Scholarship

William and Florence Crowther Scholarship

George Koenig Scholarship

Walter Vaughn Scholarship

Dr. Robert Mastronardi Memorial Scholarship

Herbert Law Scholarship

Grace LeGendre Scholarship

Northeast Educational Opportunity Award (EOA)

American Chiropractic Scholarship (SACA)

Standard Process Scholarship

American Black Chiropractic Association (ABCA)

Northeast International Student Scholarship

Northeast Academic Scholarship

VETERAN AND MILITARY SERVICE MEMBER BENEFITS

It is part of Northeast's mission to provide high quality services and support to those who have honorably served, and are currently serving our country. As evidence of this effort, the College has made a voluntary commitment to meet the standards of (Executive Order 13607) "The Principles of Excellence for Educational Institutions Serving Service Members, Veterans Spouses, and Other Family Members." The primary point of contact regarding all Veterans and Military Service Member benefits and services administered by the College is Northeast's Director of Financial Aid.

The Director may be contacted by telephone at 315.568.3063 or email financialaid@northeastcollege.edu.

Veterans Benefits

All academic programs listed in the General Information section of this catalog are approved programs with the New York State Bureau of Veterans Education. For veterans and their dependents who qualify for VA benefits, certification and monitoring of their enrollment status occurs in the Financial Aid office. Students should contact the Financial Aid office concerning any questions about the certification of their benefits. Recipients may receive funding from the various veterans programs, such as Chapters 30, 31 (federal vocational rehabilitation), 33 (Post-9/11), 33 Yellow Ribbon, 35, 1606 (reservist/national guard) and others. Students should contact their Veterans Affairs office to find out for which programs they qualify, go to the VA website at www.va.gov, or call 888.442.4551.
In accordance with the requirements of Title 38 US Code 3679 subsection (e), Northeast adheres to the following VA payment and billing policies.

Students granted a tuition payment deferral, based on VA funded payments under Post 9/11 (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31), are permitted to attend and fully participate in their course of studies during the documented period in which VA funding is pending. In order to be granted a tuition payment deferral, a student must provide the Financial Aid office (prior to the first day of class) a recent VA Certificate of Eligibility (COE) stating entitlement to a sufficient level of assistance under Chapter 31 or 33 to cover the outstanding student account balance minus any other pending aid.

Once the VA tuition payment deferral is granted, the school will not:

- prevent or delay the student's enrollment for financial reasons,
- assess a late tuition payment penalty fee to the student,
- require the student secure alternative or additional funding, or

- deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including, but not limited to, access to classes, library, or other institutional facilities.

Explanations of Possible Veterans Benefits Eligibility

If you served on Active Duty, you might be eligible for education benefits offered by the Department of Veterans Affairs. For example, the Post-9/11 GI Bill® provides financial support for educational and housing expenses to individuals with at least 90 days of aggregate service after September 10, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post-9/11 GI Bill®. Under the Post-9/11 GI Bill®, Veterans have an option to transfer their educational benefits to their spouse or children. To explore your benefit eligibility, you should go to the VA website at www.va.gov, or call 888.442.4551.

New York State residents may receive benefits through the following programs: Regents Award for Children of Deceased or Disabled Veterans and the Vietnam/Persian Gulf Veterans Tuition Award. Contact New York State Higher Education Services Corporation at 888.697.4372 for more details on these programs.

Explanation of Possible Military Service Member Benefits

For those who are currently serving in the military, the service member, their spouse or children may be eligible for funding offered through the Department of Defense Tuition Assistance program. Military service members should contact their Educational Services Officer (ESO), military counselor or service as early as possible to explore their financing options. For general information regarding each service's application and approval process, you may also refer to the MILITARY ONE SOURCE website www.militaryonesource.mil/ under "Education & Employment Benefits."

In order to be granted a tuition deferral, you must confirm your eligibility status and the amount for which you qualify with your branch of service. If you are the spouse or child of a service member who is serving on active duty Title 10 orders in the paygrades of E1-E5, O1-O2, or W1-W2, you may be eligible for financial assistance from the Department of Defense for education, training, and/or the occupational license and credentials necessary for a portable career.

In order to be granted a tuition payment deferral, a student must provide the financial aid office (prior to the first day of class) a contract or confirmation stating entitlement to a sufficient level of assistance under the Military Tuition Assistance program to cover the outstanding student account balance minus any other pending aid.

In accordance with the school's Principles of Excellence for Educational Institutions Serving Service Members agreement with the Department of Defense, once the tuition payment deferral is granted, the school will not:

- prevent or delay the student's enrollment for financial reasons,
- assess a late tuition payment penalty fee to the student,
- require the student secure alternative or additional funding, or
- deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, library, or other institutional facilities.

Academic Program Withdrawal Due to Military Service

Veteran, Service Member, National Guard and Reserve needing to withdraw from their academic program for a period of time, due to active military service, will be granted readmission protection (in accordance with section 484C of the Higher Education Act of 1965). When a student is notified of their call to active duty or activation, they should inform the school's Director of Financial Aid verbally (315.568.3063) or in writing (financialaid@northeastcollege.edu). In addition, they should present to the school a copy of *service member orders or absence for service notice* as soon as possible.

Readmission protections will be granted upon the school's receipt of an official document stating the

student's activation to service. Protections include automatic readmission to the student's academic program, at the earliest possible time as well as reentering with the same academic standing status as the student's last period of enrollment. The student must notify the school of their intent to return no later than three years after completion of the period of service, unless there are documented extenuating circumstances. Service member requests for reenrollment must be made to the Registrar's office or the Director of Financial Aid.

STUDENT LOANS

Federal Direct Unsubsidized Loan Program

The Federal Direct Unsubsidized Loan Program is available to students who do not have sufficient financial resources to meet their needs. The Stafford Loan amounts borrowed cannot exceed the student's total cost of education, minus other financial aid. The U.S. Department of Education determines a fixed interest rate each award year for loans borrowed during that year. The borrower is responsible for accruing interest during in-school, repayment, deferment, and grace periods. Payment of interest during these periods may be deferred until the borrower enters repayment. Students matriculating in the Doctor of Chiropractic (D.C.) program may borrow a maximum of $33,000 per academic year (two trimesters at Northeast). The maximum aggregate amount a D.C. student can borrow in combined subsidized and direct unsubsidized loans is $224,000, which includes any amounts borrowed as an undergraduate. For all other Northeast graduate programs, the maximum is $20,500 per academic year (two trimesters at Northeast). The maximum aggregate amount of combined subsidized and unsubsidized loans is $138,500, which includes any amounts borrowed as an undergraduate. Please contact the Financial Aid office or go to the website https://studentaid.gov for detailed information on current origination fees, interest rates, repayment options, and additional loan terms.

Federal Graduate PLUS Loan

The Federal Graduate PLUS Loan Program (GradPLUS) is available to graduate students who do not qualify for sufficient funding from other financial aid programs to meet their financial need. The amount of the GradPLUS loan that a student receives cannot exceed the student's total cost of education budget, minus any other financial aid. The U.S. Department of Education (ED) determines a fixed interest rate each year for loans borrowed during that year. The borrower is responsible for any accrued interest during in-school, repayment, deferment, and grace periods. In order to be eligible for a GradPLUS loan, a student or co-borrower must meet credit worthy status criteria as set by the ED. It is the student's responsibility to maintain their credit worthy status or have a willing credit worthy co-borrower available throughout their time of enrollment. Contact the Financial Aid office or go to the website https://studentaid.gov for further details regarding loan terms and eligibility criteria.

Deferment/Repayment/Consolidation

Students who have borrowed from federal loan programs while attending Northeast may become eligible for deferments, loan consolidation, loan forgiveness, and various other repayment options. Detailed information on these topics is available in the Financial Aid office or go to the website https://studentaid.gov/.

Federal College Work Study Program

This is a federal student aid program, funded jointly by the federal government and Northeast, that provides part-time employment for eligible students who have an unmet financial need. Work assignments are made in various departments – including the Health & Fitness Center, Library, and administrative offices – as well as in community-service positions. Contact the Financial Aid office for applications and other details.

Canadian Government Financial Aid

Many Canadian chiropractic students receive provincial student loans through the Canadian government, private student lines of credit through Canadian lenders, home equity lines of credit, and private U.S. bank loans secured with U.S. co-signers. Contact the Financial Aid office for information on how to apply to the various provinces' and territories' financial-aid programs

Academic Policies & Regulations

The following section highlights the College's academic policies and regulations. Please refer to the Academic Affairs Policy and Procedure Manual and the Student Guide for detailed policies and procedures.

POLICY ON ACADEMIC FREEDOM/ACADEMIC RESPONSIBILITY

Northeast College of Health Sciences is a nonprofit, coeducational, multipurpose professional institution. It is the policy of Northeast to foster and maintain full freedom of discussion, inquiry, teaching and research. Every member of the College's faculty is entitled to discuss relevant subjects freely in the classroom. In research and publication, faculty are entitled to discuss freely those subjects with which they are versed in order to encourage inquiry and to present and solicit relevant opinions and conclusions. While free to express those ideas which seem justified by the facts, faculty members will maintain standards of sound scholarship and competent teaching. The denigration or disparagement of individuals or ideas is not tolerated.

When speaking or writing as citizens, faculty are free from institutional censorship or discipline. All communication will be in accordance with the principles of scholarship. Faculty will be accurate, exercise appropriate restraint, show respect for the opinions of others, and clearly indicate when they are serving as spokespersons for the College.

Guest speakers are expected to adhere to this policy and maintain the same standards of scholarship as regular faculty, or be prohibited from future College forums.

Academic Integrity

Members of the academic community are expected to observe strict integrity in all phases of their work. All cases of academic dishonesty will be handled through the College's judicial process, and may result in sanctions or permanent dismissal from the College.

Academic Freedom for Faculty and Students

The freedom of an instructor to organize their course according to the highest academic standards of pedagogical excellence is basic to the academic freedom of both faculty and students.

The 1967 "Joint Statement on Rights and Freedom of Students" makes it clear that students should have the right to freedom of expression and proper academic evaluation:

- Protection of Freedom of Expression: Students should be free to take reasoned exception to the data or views offered in any course of study and reserve judgment about matters of opinion. They are responsible for learning the content of any course of study in which they are enrolled.

- Protection Against Improper Academic Evaluation: Students should have protection through orderly procedures against prejudiced or capricious academic evaluation. At the same time, they are responsible for maintaining standards of academic performance established for each course in which they are enrolled. In keeping with these mutual rights and responsibilities, instructors make it clear in the course syllabus how a course is structured and how students' progress will be assessed. This evaluation and learning process, in accordance with College policy, will include a final exam.

FULL-TIME STATUS

Northeast College of Health Sciences defines a full-time student as one who is registered for a trimester course load of twelve (12) semester hours of credit or more.

HALF-TIME STATUS

Northeast College of Health Sciences defines a half-time student as one who is registered for a trimester course load of six (6) to eleven (11) semester hours of credit.

DEFINITION OF CREDIT HOUR

Northeast College of Health Sciences adheres to the New York State Education Department's definition of a credit hour, which is based on the U.S. Department of Education's definition of a credit hour, as follows:

Semester hour means a credit, point, or other unit granted for the satisfactory completion of a course which requires at least 15 hours (of 50 minutes each) of instruction and at least 30 hours of supplementary assignments, except as otherwise provided pursuant to section 52.2(c)(4) of the New York State Education Department's definition of a credit hour. This basic measure shall be adjusted proportionately to translate the value of other academic calendars and formats of *study in relation to* the credit granted for study during the two semesters that comprise an academic year.

The U.S. Department of Education defines the credit hour as follows:

> An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than
>
> 1. one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or,
>
> 2. at least an equivalent amount of work as required in paragraph one (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Notes:

- This applies to all courses at all levels that award academic credit (i.e., any course that appears on an official transcript issued by the College) regardless of the mode of delivery including, but not limited to, self-paced, online, hybrid, lecture, seminar, and laboratory.

- All Northeast College of Health Sciences degree and certificate programs are approved by the New York State Education Department. Academic units are responsible for ensuring that credit hours are awarded only for work that meets the requirements outlined in this definition. The expectation of contact time inside the classroom and student effort outside the classroom is the same in all formats of a course whether it be fully online, a hybrid/blended method of face-to-face contact with some content delivered by electronic means, or one delivered in lecture or seminar format.

NON-MATRICULATED STUDENT POLICY

Certain courses offered within academic degree programs at Northeast College of Health Sciences may be of value to students not currently pursuing these degrees. It is the intent of the College to make these courses available to non-matriculated students when doing so benefits the students and does not negatively impact the College or its matriculated students.

This policy establishes the relevant guidelines and applies only to students seeking to complete courses for academic credit without enrolling in a degree program.
Non-matriculated students should have no expectation that any particular course will be available at a given time, or that if a course is available, that they will be allowed to enroll.

Courses Available for Enrollment by Non-Matriculated Students:

- Only such courses as may from time to time be specifically designated by the chief academic officer are available.

- Non-matriculated enrollment will only be accepted when such enrollment does not displace degree- seeking students or, in the sole judgment of the program Dean/Director, does not otherwise negatively impact the College, its students, or its programs.

Students Eligible for Non-Matriculated Enrollment:

1. Prior to consideration for course enrollment in a non-matriculated status, the student must complete an Application for Non-Matriculated Admission and submit transcripts of all prior post-secondary education.

2. Northeast courses carrying academic credit are contained within one or more of the College's academic degree programs. The prospective student must demonstrate that they meet all admissions criteria for the relevant program as well as the prerequisites for the course.

3. The student must receive the permission of the program Dean/Director for each class taken in non-matriculated status. Each student is expected to maintain a 2.0 GPA to be considered eligible to continue in a non-matriculated status.

4. Students enrolled in any Northeast degree program may not enroll in any Northeast course as a non-matriculated student.

Limitations on Credits Earned By Non-Matriculated Students:

- A student may not earn more than nine credits per term in non-matriculated status

Should a non-matriculated student later seek to enroll in a Northeast degree program, credits taken at Northeast while in non-matriculated status will be considered in the same manner as if they were transfer credits from another institution. If the student is admitted, all acceptable Northeast courses taken in non-matriculated status and relevant to the degree program, within a five-year time frame, shall be included in the student's degree program and considered Northeast courses for purposes of credits attempted and completed and for determining grade point average.

REGISTRATION

A student may register for classes after having paid the required tuition and fees, or after having obtained appropriate clearance from the Student Accounts office based upon approved financial aid.

Regular registration is conducted during appointed days/hours for students who have been approved to do so by the Student Accounts office, in accordance with the published calendar for tuition payment. Late registration is conducted for students who fail to qualify for the regular registration or miss the registration dates. After the close of late registration, no additional registration is possible for the term. Late registration entails an additional fee.

ACADEMIC GRADING SYSTEM

The following grading system is used to evaluate mastery of course work.

Grade Ranges		Grade Descriptions
90-100	A / 4.0	Consistently exceeds performance standards.
80-89	B / 3.0	Meets and occasionally exceeds performance standards.
70-79	C / 2.0	Meets performance standards.
0-69	F / 0.0	Fails to meet minimal performance standards. The student is required to repeat the course in its entirety.

P / 0.0 Indicates successful achievement of all course objectives, including practical and clinical skills. This grade carries no quality points and does not affect the trimester or cumulative grade point average.

Administrative Grades

Grades that may be administratively assigned are described below, together with their impact, if any, on the trimester and cumulative GPA.

W Indicates withdrawal from a course prior to the completion of two-thirds of the scheduled meeting times. It does not enter into the calculation of either the trimester GPA or the cumulative GPA. The course must be repeated in its entirety.

WF Indicates withdrawal from a course after the completion of two-thirds of the scheduled meeting times. The WF grade carries 0.0 quality points and affects the GPA in the same manner as the F grade. The student must repeat the course in its entirety. Upon successful completion of the course, the new grade replaces the WF in cumulative GPA calculation, but the WF remains on the student's transcript as a component of their academic history.

XF Indicates failure for excessive absence. The grade of XF carries 0.0 quality points and affects the GPA in the same manner as the F grade. The student must repeat the course in its entirety. Upon successful completion of the course, the new grade replaces the XF in calculation of the cumulative GPA, but the XF remains on the student's transcript as a component of their academic history.

TC Indicates transfer credit granted for equivalent course work completed at another institution. It does not enter into the calculation of either the trimester or cumulative GPA.

CR Indicates credit granted by evaluation for learning equivalent to specific Northeast course work. It does not enter into the calculation of either the trimester or cumulative GPA.

XA Indicates that a student was registered to audit a course but did not comply with the attendance requirement related to that registration.

AU Indicates that the student has audited the course and no academic credit has been granted upon completion of the course. It does not enter into the calculation of either the trimester or cumulative GPA. Students must have the permission of the instructor and dean to audit courses.

NR Indicates that no grade was reported by the instructor to the Registrar. This is temporary and does not affect the trimester or cumulative GPA.

I Indicates that achievement of course objectives, or clerkship in the outpatient health centers, was not fully evaluated, and/or an examination or other requirement had not been completed when grades were submitted to the Registrar at the end of the trimester. For other than clinic-service phase courses, if all course requirements are not met by the end of the second week of the next trimester, the I grade becomes an F and the course must be repeated in its entirety. For clinic-service phase courses, all course requirements must be met by the second Friday following the end of that trimester, or the I grade will become an F and the course must be repeated in its entirety.

ACADEMIC HONORS

Academic excellence is rewarded throughout the program of study as well as at graduation.

The Dean's List is compiled after the close of each trimester, identifying those students carrying a minimum of 17 credits in the D.C. program who have achieved a trimester GPA of 3.50 or higher.

D.C. students are named to the Phi Chi Omega honor society after achieving Dean's List status for three consecutive trimesters prior to the end of their seventh trimester.

All graduates who have earned a cumulative grade point average of 3.75 or higher will receive an Honors designation.

In addition, a number of special graduation awards are presented to chiropractic graduates who have distinguished themselves in specific areas. Recipients are selected by the Awards Committee, which includes representatives of the administration, faculty, and student body.

These honor designations are indicated on the diploma, and are based on the cumulative GPAs of students who complete their educational study at Northeast.

STUDENT RECORDS

Federal, state and institutional regulations and requirements guide the maintenance, retention, and disposal of student records. A directory of where student records are maintained at Northeast, and the institution's retention/disposal policy, may be viewed in the Registrar's office.

Family Educational Rights and Privacy Act

Northeast College of Health Sciences complies with the requirements as set forth by the Family Educational Rights and Privacy Act of 1974, as amended (Buckley Amendment). This Amendment establishes a student's right to: (a) inspect and review education records; (b) amend education records; and (c) have some control over the disclosure of information from education records. Education records are all those records that: (a) contain information that is directly related to a student; and (b) are maintained by an educational agency or institution or by a party acting for the agency or institution.

A student is defined as "any individual who is or has been in attendance." Students are notified of their rights under this amendment on an annual basis at the time of registration. A copy of Northeast College of Health Sciences' institutional policy statement regarding this Amendment may be reviewed in the Registrar's office.

Trimester Grade Reports

Following the close of each trimester, a trimester grade report showing course grades, credits, and GPA for the trimester, as well as cumulative credits and GPA, is available to each student.

Transcripts

Official transcripts are mailed directly by the Registrar's office to authorized agencies such as state boards, professional organizations, and other educational institutions, upon written request. Unofficial transcripts are issued to the student or former student. All transactions related to transcripts are carried out in compliance with the Family Educational Rights and Privacy Act of 1974, as amended (FERPA).

COURSE WITHDRAWAL

A student may voluntarily withdraw from a course prior to the completion of two-thirds of the scheduled meeting times. It is expected that the student who withdraws from a core course will re-enroll in the subsequent trimester or whenever the course is offered next. Withdrawal from core and elective courses may have an impact upon financial aid eligibility, anticipated graduation date and National Board eligibility.

PROGRAM WITHDRAWAL, READMISSION, AND INTERRUPTION

Program Withdrawal and Readmission

Official Withdrawal occurs when a student voluntarily withdraws from the College, completing the required clearance procedures, or when a student is administratively withdrawn from the College. Students voluntarily withdrawing from the College must contact the Center for Student Support or the program Dean/Director to begin the withdrawal process.

An unofficial withdrawal occurs when a student ceases attending their regularly scheduled classes, fails to register for the next trimester, and/or does not complete required official withdrawal procedures.

Any withdrawal is a complete separation from the College. A former student is not eligible to register again unless they have been officially readmitted. To be considered for readmission, a former student must submit a written request to the Registrar's office. The readmission committee will conduct a review of the request for readmission and may require additional documentation and/or a personal interview prior to final determination of readmission.

The College's grading policies related to course withdrawals apply to full withdrawals.

Period of Program Interruption

In exceptional cases, students may be granted a temporary Period of Program Interruption (PPI). A PPI is not considered a complete separation between the student and the College and allows a student to return to their academic program at the most opportune time for them to compete the remaining program requirements. A PPI academic program standing may be voluntarily requested by the student, or it may be involuntary when administratively imposed by a College official.

Students requesting a voluntary PPI must contact the program Dean/Director to begin the process. Requests must be submitted with documentation substantiating the need for the program interruption. Following the approval of a student request, a voluntary PPI is an authorized, temporary period of nonattendance from scheduled classes, granted by the academic program's Dean, Director, or other designated College administrator. Reasons considered for an academic program interruption are limited to documented situations outside of the student's control that require the student to be absent from the College for a period of time extending beyond the regular course attendance policy. Examples of authorized periods of nonattendance include, but are not limited to, student medical condition/treatment, military service, illnesses or death of an immediate family member.

An involuntary PPI is an administrative action initiated by the College in situations where a College Official determines that a temporary period of student nonattendance is necessary. Circumstances for involuntary PPI include, but are not limited to:

- behavior that harms, or threatens to harm, the health, safety, well-being of the College community as a whole or any person(s), including the student themself; or

- is significantly disruptive to the learning, residential, or professional environment.

Decisions to impose an involuntary PPI are made on a case-by-case basis under the authority of the Executive Director for the Center for Student Support, in consultation with other appropriate offices including, but not limited to, the College's Counseling Services. Except in emergency circumstances, the student will be given the opportunity to respond to a proposed involuntary PPI and to provide additional information for consideration before an involuntary PPI is imposed. In the event of an emergency, the student will be given an opportunity to respond shortly after the imposition of the PPI (usually within a few days).

The student will be notified of the reason(s) for the involuntary period of program interruption as well as any stipulations and/or requirements that will need to be satisfied during the PPI or are required of the individual

in order to return to the College. A student seeking to return to the College following an involuntary PPI must provide documentation that all requirements and/or stipulations have been satisfied. The student may be required to have an assessment/ clearance by a counselor or another healthcare professional as a condition for re-enrollment.

A student who is unable to, or chooses not to return to the College at the conclusion of the length of the approved voluntary or imposed involuntary PPI, or who does not meet the conditions placed by the College on the student's resumption of studies, is officially withdrawn from the College and must seek readmission as per the withdrawal policy above.

The grading policies related to course attendance and/or withdrawals apply to voluntary and involuntary PPIs. Students who have been granted/assigned a voluntary or involuntary PPI are not required to be readmitted to the academic program upon their return. However, returning students may be required to complete additional academic requirements if curricular changes were enacted in the program during the period of program interruption. For PPI periods extending more than 14 days (from the student's last date of attendance), the student may be placed on an institutional withdrawal status for the purpose of financial aid eligibility and enrollment reporting. Voluntary and involuntary PPIs may be granted or imposed for a specific or an indefinite period but each PPI is limited to a maximum period of six months and may be renewed or extended at the discretion of the appropriate College official.

Process for Appeal of PPI Decision

A student has the right to appeal the decision regarding the PPI with the Provost and Vice President for Chiropractic, in writing, within seven calendar days of the student's receipt of written notification of the decision. The appeal must delineate the reason(s) why the student believes the decision is inappropriate and should include any information the student would like considered. The Provost and Vice President for Chiropractic, or a designated College Official, will review the submitted appeal and may uphold, reverse, or alter the decision or the requirements to satisfy the terms of the PPI. The decision will be communicated to the student in writing and shall be considered final.

Where circumstances warrant, the Executive Director for the Center for Student Support may direct a student to leave the campus immediately, pending a decision regarding a voluntary or involuntary PPI. In that circumstance, the student will be required to leave campus and is not permitted on campus grounds or facilities including, but not limited to the residence halls, library, athletic center, and health centers. Students living campus housing will be provided with a reasonable timeframe to vacate their suite.

Leave of Absence

A leave of absence (LOA) can be requested by any student who needs to take a break from Northeast College of Health Sciences, but plans on returning to resume their studies and complete their degree. A leave of absence may not exceed one trimester within a 12-month period. Additionally, a leave of absence may not apply to all programs and/or locations.

An LOA can only be initiated during a "break" (the time between the end of one trimester and the start of the following trimester). The request should be made with the Registrar's Office. A leave of absence form must be completed and approved by the applicable College designee(s).

If approved, a leave of absence will be recorded on a student's transcript. If a student on an approved leave of absence does not return for the subsequent trimester, the transcript note will be changed from "Leave of Absence" to "Withdrawn." If a student is withdrawn and wishes to return to the College in a future trimester, they must follow the formal readmission process.

Students requesting a leave of absence should speak with Student Accounts and the Financial Aid Office to discuss the impact the LOA may have on any charges or financial aid (grants, loans, scholarships, etc.).

Students who wish to return from a leave of absence must initiate the process by contacting the Registrar's Office, prior to the start of the next trimester. A student must attend at least one class to be considered enrolled for that term.

Doctor of Chiropractic

PURPOSE STATEMENT

The Doctor of Chiropractic degree program at Northeast College of Health Sciences prepares individuals to become portal-of-entry healthcare providers with an expertise in the diagnosis and conservative treatment of conditions related to the spine and neuromusculoskeletal health. This is achieved through a rigorous academic curriculum distinguished by extensive and diverse clinical experiences. Northeast College graduates are highly skilled professionals and leaders in healthcare. They are integral members of patient care teams who use evidence-informed practices to serve and improve the overall health of their communities.

Doctor of Chiropractic Program Certificates

Advanced Certificate in Whole Food Nutrition

The Whole Food Nutrition Advanced Certificate supports the College's mission of academic excellence by providing diversity to the nutrition curriculum and embracing the concept of whole food nutrition. Given the increased interest in whole food nutrition among both students and practitioners, Northeast has developed an advanced certificate to offer students who have a desire to use nutrition in their practice with a whole food foundation which provides an approach to patient care that is distinct from the core curriculum. The Certificate incorporates four core curriculum courses from the Doctor of Chiropractic program plus an elective course, The Basics of Whole Food Nutrition.

Advanced Certificate in Sports Science and Human Performance

The Advanced Certificate in Sports Science and Human Performance (SSHP) is a concentration designed to support our students with an interest in management and treatment of the athlete. The series of courses and clinical opportunities will advance the students' knowledge, skills, and abilities in the care of the athletic population.

The SSHP Advanced Certificate is designed to foster student growth and development, focusing on treatment and management of the athletic population.

- The student will demonstrate knowledge of the concepts of the Athletic Triage Model and the role chiropractic can play as part of an integrated healthcare team.
- The student will study the role chiropractic plays in restoration and regeneration as it pertains to athletic performance.
- The student will identify the necessity of appropriate diagnosis and management to support quality patient care.

Advanced Certificate in Custom Stabilizing Orthotics

The core courses selected provide a strong foundation of understanding of the anatomy and function of the lower extremity. The elective provides specific training and opportunity to analyze gait and posture in a number of normal and pathologic conditions. Students will also have the opportunity to scan images, order and fit individuals for Custom Made Stabilizing Orthotics.

PROGRAM GOALS

1. To provide state-of-the-art educational experiences that integrate the teachings of foundational sciences, clinical sciences, integrative chiropractic therapies, principles of healthcare practice, and patient care.

2. To provide exceptional clinical experiences that emphasize evidence-informed care in diverse settings with a variety and volume of patient populations and health challenges.

3. To provide interprofessional educational experiences that prepare graduates for integrative and collaborative care.

4. To empower students to become caring and effective leaders in their community and the chiropractic profession.

5. To provide support services that maximize students' potential for success in the program and their professional career.

6. To position the program as a center for knowledge creation, dissemination, and implementation.

7. To foster an environment that models integrity, compassion, accountability, and ethical behaviors in alignment with the chiropractic professional standards.

LEARNING OUTCOMES

By graduation, students will demonstrate the ability to:

1 – Assessment & Diagnosis

Assessment and diagnosis require developed clinical reasoning skills. Clinical reasoning consists of data gathering and interpretation; hypothesis generation and testing; and critical evaluation of diagnostic strategies. This dynamic process includes the collection and assessment of data through history, physical examination, imaging, laboratory tests, and case-related clinical services.

1. Perform a case-appropriate history that evaluates the patient's health status.

2. Perform a case-appropriate examination that leads to the identification of significant findings and determine the need for additional examination, diagnostic and/or confirmatory tests, and consultations.

3. Perform/order and interpret clinical laboratory, imaging, and other diagnostic studies required for formulating an appropriate diagnosis.

4. Demonstrate clinical reasoning to generate a corresponding list of current/active diagnosis/es.

2 - Management

Management involves the development, implementation and monitoring of a patient care plan for positively impacting a patient's health and well-being, including specific healthcare goals and prognoses. It may include case follow-up, referral, and/or collaborative care.

1. Use relevant scientific literature and other evidence to inform patient care.

2. Develop an evidence-informed management plan appropriate to the diagnosis, including elements such as obstacles to improvement, measurable healthcare goals, prognoses, and target endpoint of care in consideration of bio-psychosocial factors, natural history, and alternatives to care.

3. Identify the need and refer for emergency care as appropriate.

4. Perform a review of findings that outlines benefits, risks, and alternatives to care and obtain informed consent for care.
5. Deliver appropriate chiropractic adjustments/manipulations and/or other forms of passive care.

6. Implement appropriate active care.

7. Make recommendations for changes in lifestyle behaviors, including activities of daily living and/or dietary and nutritional habits as appropriate.

8. Identify maximum improvement and document the endpoint of care or determine rationales for continuing care or referral.

3 – Health Promotion and Disease Prevention

Health promotion and disease prevention requires an understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognition of the impact of biological, chemical, behavioral, structural, psychosocial and environmental factors on general health.

1. Manage health risks and public health issues, including reporting, as required.

2. Identify, recommend, and/or provide resources (educational, community-based, etc.) for influencing public health.

3. Apply appropriate hygiene practices in the practice environment.

4 – Communication and Record Keeping

Effective communication includes oral, written and nonverbal skills with appropriate sensitivity, clarity and control for a wide range of healthcare-related activities, to include patient care, professional communication, health education, record keeping, and reporting.

1. Document health risks and management options considering the patient's health care needs and goals.

2. Exhibit verbal and non-verbal communication skills supportive of patient-centered care.

3. Safeguard and keep confidential the patient's protected health and financial information.

4. Generate patient records, narrative reports, and correspondence that comply with state and federal laws and regulations and applicable/accepted industry standards.

5 – Professional Ethics and Jurisprudence

Professionals are expected to comply with the law and exhibit ethical behavior.

1. Maintain appropriate boundaries with patients, including physical, communication (verbal and non-verbal), and emotional.

2. Maintain professional conduct with patients, peers, staff, and faculty.

3. Comply with the ethical and legal dimensions of clinical practice.

6 – Cultural Competency

Cultural competency includes the knowledge, skills, and core professional attributes needed to provide care to patients with diverse values, beliefs, and behaviors, including the tailoring of health care delivery to meet patients' social, cultural, and linguistic needs in an effort to reduce disparities in healthcare delivery.

1. Communicate respectfully and effectively with patients of diverse social, cultural, and linguistic backgrounds in a manner that protects the dignity of individuals and communities.

2. Design a care plan that considers and respects the culture of the patient.

7 – Chiropractic Adjustment/Manipulation

Doctors of chiropractic employ the adjustment/manipulation to address joint and neurophysiologic dysfunction. The adjustment/manipulation is a precise procedure requiring the discrimination and identification of dysfunction; interpretation and application of clinical knowledge; and the use of cognitive and psychomotor skills.

1. Identify subluxations/segmental dysfunction of the spine and/or other articulations.

2. Analyze and interpret findings indicating the need for chiropractic adjustment/manipulation.

3. Identify indications, contraindications, and risk factors for the chiropractic adjustment/manipulation and explain the anticipated benefits, potential complications, and effects to patients.

4. Apply chiropractic adjustment/manipulation to patients while ensuring patient safety.

5. Identify the effects following the chiropractic adjustment/manipulation.

8 – Inter-Professional Education

Students have the knowledge, skills, and values necessary to function as part of an inter-professional team to provide patient-centered collaborative care. Inter-professional teamwork may be demonstrated in didactic, clinical, or simulated learning environments.

1. Communicate information with health team members in a manner that is understandable, avoiding discipline-specific terminology when possible.

2. Apply collaborative strategies with members of the healthcare team to support a team approach to patient-centered care.

9 – Leadership and Business Practices

Leadership and business practices are important abilities required to become successful owners or employees of a healthcare practice. Doctors of Chiropractic apply leadership principles to create a practice environment that serves the interests of patients, optimizes the operations of the office, and complies with professional responsibilities.

1. Develop and nurture professional relationships with patients, colleagues, and the community.

2. Implement strategies to be competitive for new employment opportunities.

3. Explain the role of employers in the management, training/guidance, and support of employees.

4. Generate and utilize appropriate billing, coding, and other office policies and procedures.

5. Identify, analyze, and modify marketing and operational strategies based on performance metrics and practice goals.

6. Operationalize budgets and review financial statements.

ADMISSION PROCESS AND GUIDELINES

Admission Process and Guidelines

Northeast offers rolling admissions. Applications are accepted until all of the available seats have been filled.

To be certain that students have enough time to complete all steps in the application process, and to have adequate time for appropriate financial aid planning to begin classes when desired, application to Northeast should begin six to nine months in advance of the intended start date.
Characteristics of a successful candidate for admission include:

- superior communication skills, both oral and written;
- a good understanding of the nature of the student's intended profession as distinguished from other healing arts;
- evidence of strong motivation to become a healthcare practitioner;
- initiative and honesty, as evidenced by the candidate's transactions within the application process and in all information submitted in support of the application; and
- academic achievement that compares favorably to that of successful students at Northeast.

Northeast only accepts applications online.

Online application: www.northeastcollege.edu/apply. A non-refundable $60 application fee is required at the time of submission. Applications will not be processed until received. Northeast admissions offers a free transcript evaluation service where unofficial transcripts can be evaluated to determine eligibility for admission into the Doctor of Chiropractic program prior to applying. In support, we require either a scanned copy or a downloaded version of unofficial transcripts from every college or university attended. The institution name and student name must be visible on all transcripts. Scanned copies must be clearly legible and sized to print on standard size paper. Transcripts that do not show degrees awarded must also be accompanied by a scanned copy of the diploma or degree certificate. If academic transcripts were issued in a language other than English, both the original documents and certified English translations are required.

A one to two page personal statement providing a brief, personal profile of the applicant, including philosophy as a healthcare provider and motivations for applying to Northeast is required.

Two written references must be submitted from:

- a chiropractor or healthcare provider (a chiropractor is strongly encouraged), and
- an academic instructor or work supervisor.

Reference contact information is requested on the application. Upon submission of the application, an email with the recommendation form will automatically be sent to each reference for completion. If a chiropractic reference is needed, Northeast Admissions staff can assist you in finding a local chiropractor to shadow. References from family members will not be accepted.

Eligible applicants will complete a virtual admissions interview with a Northeast faculty member. This interview assesses the candidate's motivational characteristics and personality strengths.

After the applicant has satisfied admission requirements by supplying documentation and completing a faculty interview, the prospective student's complete application package will be reviewed by the Admissions Committee. Upon completion of the review, the applicant will be notified of the College's admission decision. Notification specifying the entering class term is provided to all accepted applicants. Prospective students must have official transcripts from ALL colleges or universities they have attended sent directly to the Northeast Admissions office. For transcripts received from institutions under academic probation by their regional accrediting organization, credit received for coursework completed while the institution was accredited will be accepted. An official acceptance occurs only after the selected candidate has supplied official transcripts and other documents as required.

Applicants notified of acceptance or invited to continue their candidacy are expected to complete a decision reply form and deposit to indicate their enrollment intentions. Those accepting an offer of admission must make a non-refundable deposit of $400 within 30 days following notification to secure a seat in the desired class. The deposit will be applied toward the first trimester's tuition and fees. The Admissions office may adjust the non-refundable deposit amount depending on the application date in relation to the trimester start date.

Submission of fraudulent documents, misrepresentation, or deliberate omission of any relevant information in the application process shall be sufficient cause for rejection of the candidate prior to admission, revocation of admission, and dismissal if admitted as a student.

Applications and supplemental documents received will remain active for 12 months from date of submission, at which time they will be deleted.

Notice of Nondiscrimination

Northeast College of Health Sciences admits students of any race, color, religion, disability, national origin, sexual orientation, gender identity or expression, military status, sex, age or marital status to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, religion, disability, national origin, sexual orientation, gender identity or expression, military status, sex, age or marital status in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

Application Deferral

Applicants for a particular term may defer their admission to a subsequent term, with the approval of the Admissions office and based on the availability of space. If space is no longer available for the trimester requested on the application, the applicant will be contacted by the Admissions office and considered for the next available trimester. As a courtesy to other applicants, an accepted candidate who ultimately does not plan to enroll at Northeast is requested to notify the Admissions office of this fact so another student can be admitted in this slot. Applications and supplemental documents received will remain active for 12 months from date of submission, at which time they will be deleted.

Information Sessions

You are invited to attend our virtual or on-campus program events to check out our classrooms, labs, and innovative learning spaces as well as meet our expert faculty and dedicated students.

For further information on registering for an information session, visit https://www.northeastcollege.edu/admissions/open-house.

You are invited to visit the Northeast campus in a variety of formats:

- online virtual tour at https://www.youvisit.com/tour/northeastcollege,
- live virtual tour with a tour guide using FaceTime, Duo or Skype,
- on-campus tour with a tour guide.

For further information on visiting Northeast or to schedule an appointment, contact the Admissions office at 800.234.6922.

ACADEMIC REQUIREMENTS FOR ADMISSION

Northeast College of Health Sciences will admit candidates into the Doctor of Chiropractic program whose goals, abilities, and character are consistent with the program's purpose and who have completed the equivalent of three academic years of undergraduate study (90 semester hours) at an institution(s) accredited by an agency recognized by the U.S. Department of Education or an equivalent foreign agency with a grade point average in these designated 90 hours of not less than 3.0 on a 4.0 scale.

The 90 hours will include a minimum of 24 hours in life and physical science courses. These science courses will provide an adequate background for success in the program, and at least half of these courses will have a substantive laboratory component. The candidate's undergraduate preparation also includes a well-rounded general education program, examples of which consist of the humanities, social sciences, fine arts, business management, and other course work deemed relevant, to achieve success in the curriculum.

A life science is any of several branches of science, such as biology, medicine and ecology, which study structural and functional organization of living organisms and their relationship to each other and the environment. A physical science is any of several branches of science, such as chemistry and physics that study the nature and properties of energy and nonliving matter. Included in this category are movement science course work such as kinesiology, exercise science and biomechanics.

Candidates who have a grade point average of 2.75 to 2.99 in the designated 90 semester credit hours may be considered for admission under Northeast's alternative admissions criteria consistent with the Council on Chiropractic Education's guidance. Students admitted under this criteria will be provided an individual education plan designed to optimize their opportunity for success.

Applicants should also be aware that individual state licensing boards may have slightly different educational requirements for licensure.

All students interested in admission to the Doctor of Chiropractic program should contact the Admissions office for a transcript review and evaluation as well as obtain information regarding campus visits and admission interviews.

Pre-Chiropractic Articulation Programs

High-priority status is given to students in special pre-chiropractic programs in which an articulation agreement exists with Northeast. Joint-degree programs (B.S./D.C.), during which the student can save a year in the completion of the two degrees, are described later in this Catalog. Candidates for admission should be informed of scholarship opportunities based on academic excellence. Some scholarships are awarded at the time of admission and others throughout the program.

Recency of Prerequisite Course Work

All life and physical science coursework should have been completed within 10 years of the matriculation date at Northeast. The College evaluates each case individually and, if necessary, may require refresher courses in the life and physical sciences including laboratory components to help ensure the candidate's preparation for success at Northeast.

Advanced Placement Courses

All college credit earned via Advanced Placement (AP) courses is acceptable toward meeting the entrance requirements, provided the credit was granted by an accredited degree-granting institution. In the instance of science prerequisites, certification of the grade and of the laboratory is required.

Credit through CLEP or Other Proficiency Examinations

Up to 20 semester hours of a candidate's preprofessional requirements can be earned through the College Level Examination Program (CLEP) and certain other college

proficiency examinations. These credits likewise must be granted by an accredited degree-granting institution. None of the science prerequisites can be satisfied through examination programs.

Transfer Applicants

In addition to meeting Northeast's current entrance requirements, transfer applicants must have met the Northeast entrance requirements in force at the time they enrolled at the health-profession institution from which transfer is sought. Evidence of proficiency in the subject matter will be required for course work from professional schools in countries that do not have accreditation systems equivalent to that of the United States. Course work to be transferred must have been completed within five years of the transfer date. Exceptions may be made for candidates holding a first professional degree or an academic graduate degree in a related discipline from an accredited institution.

To be considered for transfer credit, a course (or combination of courses) must be substantially equivalent in content and credit hours to the Northeast course for which credit is sought. The student must have earned a grade of "C" or higher, and not have used the course to meet entrance requirements. Basic-science academic courses must have been taken at the professional or graduate level. A student cannot transfer any more than 50% of course work in a program and must have earned not less than the final 25% of the total credits from Northeast.

Transfer applicants must complete all application procedures and must furnish official transcripts of graduate or professional schools attended. They must obtain and complete an application for transfer credit and wait for an evaluation. An offer of transfer credit, if accepted by the candidate, is not subject to further negotiation after transfer to Northeast. In consultation with appropriate department heads and faculty, the appropriate academic dean or director may grant transfer credit under exceptional or unusual circumstances that vary from the parameters defined above.

International Applicants

Northeast welcomes applications from international candidates. Applicants who are not U.S. citizens must meet the same entrance requirements as U.S. citizens, or be qualified via a CCE-recognized, non-U.S. equivalency program. International candidates must complete the same application procedures as all others. **In addition to an Ability to Pay statement**, international applicants who did not attend a U.S. college or university or English-speaking university must also submit the following:

1. evidence of English language proficiency for select international applicants may be required. If you are an international student who attended (post) secondary school (any year) in a country other than the United States, Canada, Great Britain, or Australia, or your primary language is one other than English, you may be required to demonstrate English proficiency by successfully achieving a minimum score on one of the following exams (see chart on next page).

Examination	Minimum Score	Website
Test of English as a Foreign Language (TOEFL)	Paper-Based Test: Overall Score 500 Internet-Based Test: Total: 79; Reading: 21; Writing: 18; Listening: 21; Speaking: 19	www.toefl.org
International English Language Testing System (IELTS)	Reading: 6.5; Writing: 6.5; Listening: 6.5; Speaking: 6.5	www.ielts.org

Applicants are exempt if:

Completed 24 or more credit hours in an American college and/or have passed English Composition I, English Composition II, or if they received a four-year degree from an English speaking college or university.

2. a comprehensive evaluation of educational credentials by an appropriate agency such as World Education Services (WES), International Education Resource Foundation (IERF), SpanTrans, Academic Evaluation Services (AES), and Educational Credential Evaluators (ECE), etc.; and

3. certified English translation of educational credentials.

PRE-CHIROPRACTIC PROGRAMS

Baccalaureate Degree Offered in Conjunction With Other Institutions

Northeast has established a "3+3" program leading to the completion of a B.A. or B.S. degree and the D.C. degree in one year less than normally would be required to complete each degree individually. Students are responsible for reviewing the partner agreement with both their home school and Northeast admissions, as some partner agreements have more prescriptive requirements than others as to what classes the home school requires the student to take at their institution. Educational partnerships can be found on the College's website.

Other Pre-Chiropractic Articulation Programs

In addition to the "3+3" programs described above, Northeast College of Health Sciences maintains articulation agreements with selected institutions, leading to the assurance of admission to Northeast for students completing baccalaureate programs with a specified GPA and meeting all other admission criteria. These "4+3"programs are designed to provide the exact preparation needed by students planning to enroll at Northeast. Please contact the Northeast Admissions office for additional information about these programs. Students are responsible for reviewing the partner agreement with both their home school and Northeast admissions, as some partner agreements have more prescriptive requirements than others as to what classes the home school requires the student to take at their institution.

DURATION OF THE DOCTORAL PROGRAM

The curriculum leading to the Doctor of Chiropractic (D.C.) degree requires a minimum of 10 trimesters of 15 weeks (three years, four months) of full-time study, including the clinical clerkship. This is the equivalent of five academic years; those students who want or need to complete the program over a period longer than this minimum may do so under the guidance of the Assistant Vice President for Chiropractic. To be awarded the D.C. degree, it is mandatory that degree requirements be completed within seven calendar years of original matriculation.

Technical Standards for Program Success

Northeast College of Health Sciences (Northeast) is committed to the achievement of its mission. A candidate for the Doctor of Chiropractic program must have abilities and skills in five areas: observation and participation; communication; motor; intellectual-conceptual, integrative and qualitative; and behavioral and social. These guidelines specify the attributes that Northeast faculty consider essential for completing this program. Because these standards describe the essential functions that students must demonstrate to meet the requirements of a first professional degree program, they are prerequisites for matriculation, continuation, and graduation.

Northeast is fully committed to equal opportunity in educational programs for all otherwise qualified individuals without regard to handicap or disability, in accordance with the Americans with Disabilities Amendments Act of 2008 and Section 504 of the Vocational Rehabilitation Act of 1973. In addition to meeting academic standards, candidates for this program must also meet the following technical standards with or without reasonable accommodations throughout the full course of their education at Northeast. These standards ensure patient safety and that all candidates are otherwise qualified. Reasonable accommodations can be made in some of these areas provided that they do not require fundamentally altering the program. Requests for reasonable accommodations will be reviewed on a case by case basis by the Technical Standards Advisory Committee; however, candidates for admission and enrolled students should be able to perform in a reasonably independent manner. The use of an intermediary that would, in effect, require a student to rely on someone else's power of observation and/or communication will not be permitted. Northeast reserves the right to rescind admission or continuation to any candidate that is unable to meet all technical standards with reasonable accommodations. Any candidate should evaluate their ability to meet all

technical standards prior to submission of an application.

The Technical Standards Advisory Committee is charged to determine whether a student can meet the standards with or without accommodation and, if accommodation is required, to recommend appropriate accommodation. For complete details regarding the Technical Standards process, please refer to the Accessibility Services Guide.

Candidates for admission and enrolled students must demonstrate:

1. Observation and Participation:

    a. Observation and participation necessitate the functional use of the sense of vision, hearing, and somatic sensation. Performance of these tasks is enhanced by the functional use of the sense of smell.

    b. The ability to observe a faculty member and a patient accurately at a distance and close at hand.

    c. The ability to observe and participate in demonstrations, experiments, diagnostic procedures, and tests within all phases of education, including all laboratory and clinical settings. These may include but are not limited to human cadaveric dissections, microbiologic cultures, microscopic studies, visual interpretation of diagnostic tests and clinical patient-assessment procedures.

    d. The ability to assess asymmetry, range of motion, and tissue color and texture changes. It is essential for the student to have adequate visual capabilities for the integration of evaluation and treatment of the patient.

    e. The ability to visually identify numbers, letters, shapes, borders, and variations in contrast and densities of structures on paper or digital documents and images.

2. Communication:

    a. The ability to speak, to hear, and observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications.

    b. The ability to communicate effectively and sensitively with others.

    c. The ability to communicate effectively and efficiently in oral and written form.

3. Motor:

    a. Sufficient upper and lower body strength and balance to execute chiropractic manipulative treatments. This involves the ability to lift, bend or stabilize the limbs, head or trunk/ pelvis of patients of widely varied size and weight.

    b. Sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers; and the ability to determine depth and intensity of manual pressure and force.

    c. Sufficient motor function to execute movements reasonably required to provide general care and emergency treatment to patients. Examples include: cardiopulmonary resuscitation, the application of pressure to stop bleeding, and the ability to utilize diversified methods of manual therapy. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative and Qualitative Abilities:

    a. Sufficient intellectual abilities, including but not limited to measurement, calculation, reasoning, analysis, and synthesis. Problem-solving, a critical skill demanded of health care professionals, requires all of these intellectual abilities.

    b. The ability to comprehend three-dimensional relationships and understand the spatial relationships of structures.

5. Behavioral and Social Attributes:

    a. The psychological and emotional well-being required for the full use of their intellectual abilities; the exercise of good judgment; sound reasoning; maintenance of personal hygiene; the prompt and safe completion of all

responsibilities; and the development of mature, sensitive, and effective relationships with patients and colleagues.

b. The ability to tolerate taxing workloads, to function effectively under stress, to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties and stressful situations.

c. Personal qualities such as compassion, empathy, integrity, high ethical standards, concern for others, mature interpersonal skills, interest, and self-motivation.

d. The willingness and the ability to maintain the safety and well-being of themself and others without posing a threat.

e. The capacity to develop respectful and effective relationships with peers, patients and all members of the health care team and the general population.

Modified from the Association of American Medical Colleges. Report of the Special Advisory Panel on Technical Standards for Medical School Admission. Washington, D.C.: Association of American Medical Colleges, 1979.

HEALTH CLEARANCE POLICY FOR DOCTOR OF CHIROPRACTIC PROGRAM

Northeast College of Health Sciences considers it in the best interest of Doctor of Chiropractic students to obtain appropriate and periodic health screenings. Northeast provides such health clearance examinations to all students through the Campus Health Center at no charge. The purpose of this evaluation is to ensure the health and safety as well as the overall ability of our students to participate fully as patients and students in Northeast courses, including the clinical environment.

All first-trimester students, and any readmit or transfer students, upon matriculation at Northeast, are required to receive a complete physical examination, including additional diagnostic testing when clinically warranted. Based upon this information a clinician will clear the student for full, limited, or no participation in Northeast courses. Prior to the student receiving clearance, at the clinician's discretion they may refer the student for further testing or evaluation.

During the fourth trimester, the student must make an appointment and have a reevaluation and an update of their case history.

Students are required to report to the Campus Health Center for the purpose of updating their records if any change in health status occurs between examinations or when a referral is made by classroom or clinical faculty. If a student is located at one of the outpatient health centers, this process can occur at the respective health center. A student who experiences a change in health status may also be required by the Assistant Vice President for Chiropractic or a College official to meet with the Dean of Clinical Education or their designee, including Counseling Services, to perform a safety assessment to ensure that the student is able to participate in the Northeast coursework.

If any condition is revealed during the health clearance process or course of regular clinical care that may affect a student's ability to participate fully in any Northeast course, the condition will be classified as requiring either a short term limitation or a long term limitation.

If a student seeks a health exemption (saying that the student cannot/should not participate or may be limited to partial participation in any or all Northeast courses), this student must be examined by the clinician whom the Dean of Clinical Education appoints. Following the evaluation, a decision will be made regarding the extent of the limitation, either short term, or long term.

- If an evaluation determines that a short term limitation (six weeks or less) is required, the clinician will work with the Dean of Clinical Education, or the Assistant Vice President for Chiropractic to develop an accommodation plan for this student. (An example of this would be the student has a broken ankle.)

If an evaluation determines that a long term limitation (greater than six weeks) is required, the Assistant Vice President for Chiropractic will be notified and will determine if an accommodation can be made or if the Technical Standards process will need to be initiated. (The Technical Standards process can be found in the Academic Accommodations Handbook.) If an accommodation can be made, the Dean of Clinical Education will work with the Assistant Vice President for Chiropractic to develop the accommodation plan.

- In some circumstances, students may be eligible to receive accessibility services related to short or long term limitations. (The Accessibility Services Policy can be found in the Student Guide under Academic Accommodation Services.)

If the student wants to appeal a health clearance determination, it may be appealed to an ad hoc committee made up of the Dean of Clinical Education, a Chiropractic Clinical Sciences faculty, and a health center clinician appointed by the Assistant Vice President for Chiropractic. The committee will review the case and the decision of the committee will be final. The committee reserves the right to initiate a technical standards review if warranted.

The health center will notify any students who have not completed the health clearance policy and its significance by the beginning of week 8. By the end of week 10, the health center will provide the names of all students not cleared for participation or who have not completed the clearance process. The Registrar will place a "hold" on the student preventing the student from registering for classes. The health center will notify the Registrar once the student has met the health clearance requirements so that the "hold" can be removed.

If the student is not cleared for participation as per the technical standards of the College, the student must withdraw from the course and/or the program.

CHIROPRACTIC ADJUSTING POLICY

Since its inception, the chiropractic profession has, as its primary method of treatment, utilized the adjustment for the correction of biomechanical and neurophysiological dysfunction. Northeast College of Health Sciences prohibits the unauthorized and unsupervised use of any chiropractic technique on students or patients.

The application of any chiropractic adjusting procedure must be done under the supervision of the licensed D.C. faculty of Northeast College of Health Sciences. Administering unauthorized or unsupervised chiropractic techniques may constitute the unlicensed practice of chiropractic and could affect future licensure.

Therefore, any student who administers, receives, or observes an unsupervised and/or unauthorized chiropractic adjustment or manipulation is obligated to report such activity to the Assistant Vice President for Chiropractic or Dean of Clinical Education, who will then determine if there is cause for appropriate disciplinary action. Such action may include a judicial hearing and possible sanctions, dependent upon the outcome of the hearing.

Chiropractic Adjustment Definition

The chiropractic adjustment is defined as any chiropractic therapeutic procedure that uses controlled force, leverage, direction, amplitude, and velocity directed at specific joints or anatomic regions. Chiropractors commonly use such procedures to influence joint and neurophysiological function. Manipulation is defined as a manual procedure that involves a directed thrust to move a joint past the physiological range of motion without exceeding the anatomic limit. These definitions are to be considered together as one with regard to College policy prohibiting unsupervised chiropractic adjusting by any student.
Therefore, any thrust or impulse that appears to move a joint past its physiological range of motion and into its paraphysiological space will be regarded as a chiropractic adjustment for the purposes of enforcing Northeast policy. In addition, any other chiropractic procedure that does not use a specific thrust but does use a controlled force applied in a specific direction in an attempt to influence joint mechanics and/or neurophysiological function likewise will be regarded in the same manner. Furthermore, any procedure or technique that is performed with a therapeutic intent but that does not fit exactly into the aforementioned definitions may also be considered in the same manner as an unauthorized chiropractic adjustment.

The Doctor of Chiropractic Program at Northeast provides regular opportunities for D.C. students to practice chiropractic adjusting skills in supervised settings. These opportunities include open technique labs as well as technique clubs. All students who participate in open technique labs or technique clubs, as either a student doctor or as a student patient, must be matriculated D.C. students who have been cleared for participation through the Doctor of Chiropractic Health Clearance Policy in the Campus Health Center and have successfully completed all first and second trimester Doctor of Chiropractic technique courses. After meeting these criteria, students are authorized to practice only those chiropractic adjusting procedures that are

taught as part of the Northeast chiropractic technique curriculum.

Northeast prohibits the unauthorized or unsupervised use of any chiropractic adjusting technique on students or patients. Further, students participating in these opportunities do so only for the educational advantages that they offer. Any technique or procedure that is performed with a therapeutic intent is strictly prohibited. Any student failing to follow this policy will be subject to judicial review and possible disciplinary action under the Code of Student Conduct and Ethics.

EXAMINATION PROCEDURES AND FINAL EXAMS

Under ordinary circumstances, laboratory final examinations are scheduled during the 14th week of the trimester. Lecture final examinations are scheduled during the 15th week of the trimester. A Doctor of Chiropractic final examination schedule is published by the Registrar's Office prior to the administration of the examinations. Students are advised that examinations are scheduled Monday through Friday, at various times, and should plan accordingly. The College reserves the right to alter the usual scheduling of examinations, to include evening examinations.

Makeup Examinations

A student who is assigned a grade of I (incomplete) in a course will receive a letter of advisement at the time the grade report is issued. Makeup exams for lecture courses are scheduled during the first week of the new trimester. The student must contact the laboratory instructor to make arrangements for lab final makeup exams. In all cases, the outstanding course requirements must be satisfied within the first two weeks of the following trimester. A grade of F will be issued for those courses whose requirements are not met within the first two weeks. In exceptional circumstances related to the ability to take an examination, an I grade may be extended beyond the end of the second week of the new trimester. The student must petition for an extended approval from the faculty member and the appropriate program administrator. Petition forms may be obtained electronically in the MyNortheast Portal or in the appropriate program administrator's office.

COURSE REMEDIATION ASSESSMENT

In limited circumstances, students enrolled in the Doctor of Chiropractic program at Northeast College of Health Sciences who experience a course failure (F) may be eligible for a remediation assessment. Other course grades are not eligible for remediation assessments. Students are limited to three (3) remediation assessments during their academic program. To be eligible, the student must have met the following five (5) criteria:

1. First time enrolled in the course (W, XF are considered previously enrolled); and
2. Within 10% of the passing score of the course; and
3. Mathematically able to pass a course prior to the final course assessment; and
4. Met the minimum attendance requirement for the course; and
5. The failing grade wasn't related to a violation of the student code of conduct and ethics.

A request for a remediation assessment must be submitted by the student within one business day of the final course grade (F) posting by the faculty at the end of the course. Students whose final course grade (F) is issued after the completion of the course (e.g., when an incomplete (I) grade for a make-up exam is converted to a (F) failing grade at the beginning of the following trimester) are not eligible for a remediation assessment. When the remediation assessment request is approved, the examination is offered on the Thursday of the final week of the break, unless holidays or similar campus conflicts arise. Practical and online course assessments are coordinated between the faculty and the student and are offered at the beginning of the first week of the following trimester. All examinations must be administered and graded by the end of the first week of the next trimester. At the discretion of the course faculty, the examination may focus on either: 1) the specific learning deficiencies of the student; or 2) a comprehensive exam. The format and content of the examination is at the discretion of the faculty.

A successful remediation assessment results in a grade of C or P as the final course grade as applicable. Failure to successfully earn 70% on the remediation assessment will keep the F grade and the course must be repeated in its entirety. Students may also choose to repeat a course and not request a course remediation assessment, a decision with implications related to the standards of academic progress. If a student believes that a

remediation assessment request has been inaccurately denied or has not been correctly implemented, the student may file a grade appeal.

ACADEMIC ADVISING

Academic advising is coordinated through the Center for Student Support and provided by selected academic administrators and faculty members. Academic advising is available for all interested students. The goal of academic advising to provide preventative and interventional services in an effort to prevent academic difficulty. Academic advising is mandatory for students placed on academic warning or academic concern. If, after mid-trimester deficiency tracking, a student is identified as needing academic advising support services, an advisor will be assigned by the Center for Student Support. It is then the student's responsibility to schedule appointments with their assigned advisor to receive support in raising their academic status and succeed in their course of study.

CLINICAL SERVICE COURSES

Detailed information on specific policies related to the clinical service courses may be found in the Chiropractic Health Center Manual for students in the D.C. program. This manual is available online for students. Students are responsible for knowing and observing the policies set forth in the health center manual.

Health Center Assignment

Materials pertaining to the Clinical Services phase of the D.C. curriculum and the College's Health Center locations are accessible to all enrolled students at the Health Center Information and Resources page of the MyNortheast Portal. Included at this site are information and forms related to the Health Center application and assignment process. Throughout the program, students are directed to these resources and are encouraged to become familiar with the Health Center opportunities in order to make informed decisions about their preferences.

Process and Timeline for Health Center Application, Assignment, and Request to Change

Initial Health Center Application and Assignment

Week 12 of 5th trimester – Students submit Health Center Application, indicating site preferences and including all supporting documentation.

Week 13 of 5th trimester – Students are notified of their Health Center assignments.

Request for Change of Health Center Assignment

Students must adhere to the following procedure to request a change in Health Center assignment:

Week 14 of 5th trimester through Week 2 of 6th trimester – Students have the opportunity to exchange assignments among their classmates. The Health Center Assignment Exchange Form (available online at the Health Center Information and Resources page at the MyNortheast Portal) must be completed, signed by all parties and submitted to the Director of Clinical Operations by the end of Week 2 of 6th trimester.

Monday of Week 3 of 6th trimester – Any student not able to exchange Health Center assignments with a fellow student and wishing to request reassignment, must submit a letter detailing the need for reassignment along with all supporting documentation to the Director of Clinical Operations for review and decision by a committee comprised of the Dean of Clinical Education, Director of Clinical Operations, and representatives of Enrollment Management and Financial Aid.

Week 4 of 6th trimester – Students are notified whether their requests have been approved or denied.

Week 5 through Week 9 of 6th trimester – Students may appeal the decision of the committee to the Assistant Vice President for Chiropractic, who will be responsible for making the final decision and notifying the student and the committee.
For emergency circumstances that arise after the deadline noted above (Monday of week 3 of 6th trimester), the committee may convene on an ad hoc basis to consider students' requests for re-assignment. Students must submit emergency requests along with all supportive documentation to the Director of Clinical Operations as soon as possible after identification of circumstances warranting the request. The above noted process of review and appeal will take place as expeditiously as possible.

PREPARING FOR LICENSURE

1. Preparing for Chiropractic Licensure

Northeast College of Health Sciences offers each student in the D.C. program the education and training necessary to become a highly competent doctor of chiropractic. In granting the D.C. degree, the College certifies that its graduates have acquired the knowledge, skills, and attitudes needed to be successful chiropractic practitioners. However, the College does not engage in the licensure process. All authority regarding licensure resides with the chiropractic licensing boards of the fifty states and the District of Columbia, as well as those of various other countries.

The role of Northeast, beyond providing education and training, is to provide official transcripts of each student's academic performance to these various boards, and to certify to them and to the National Board of Chiropractic Examiners (NBCE) any specific information about a particular student's preparation that may be required. Eligibility for initial licensure in all states is established by examination, both written and practical. All state boards accept the NBCE examinations. Some states may require additional examinations to be completed as well. For information on additional examinations that applicant should contact the individual state in which they are applying. Following initial licensure, your license must be renewed in accordance with the schedule and standards of a particular state. The renewal process in some states requires additional (postgraduate) education periodically to assure that your professional knowledge is current. Northeast's Continuing Education Department can provide for continued professional development.

Licensure standards in the United States are not uniform with respect either to preprofessional or chiropractic educational requirements. In addition to varying widely, these standards frequently are revised, often making any fixed body of information about them lack currency. For the same reason, it is difficult for any chiropractic institution to comply at all times with both the pre-professional and professional educational standards of all states. The College's Center for Student Support provides a means for students to seek employment, but does not keep statistics on placement rates and success; the New York State Education Department does not provide information as to the program graduates in obtaining jurisdictional licensure. It is thus the individual student's responsibility to ascertain the licensure standards of those states in which (s)he contemplates practicing.

As an institution located in New York State, Northeast maintains the pre-professional requirements and a D.C. curriculum which conforms to this state's standards. Northeast provides full information and application materials for NBCE and for New York State licensure, and serves as a test site for NBCE Part I, II, III and Physiotherapy examinations. Current information regarding specific instances in which the D.C. program at Northeast does or may not meet eligibility requirements for licensure in a particular state is available in the Center for Student Support.

National Board Examinations

Parts I, II, III, and IV of the examinations of the National Board of Chiropractic Examiners are required by every state board of chiropractic. Additionally, some states accept the NBCE Physiotherapy exam for licensure purposes. All of the board examination information is available on the NBCE website. Eligibility criteria for the individual parts of the NBCE examinations are:

Part I: Students must have completed a full fourth trimester curriculum at the time of the examination.

Part II: Students must have completed a full sixth trimester curriculum at the time of the examination.

Physiotherapy: Students must have completed 120 hours of course work in Physiotherapy. This means that students must be in at least the 8th trimester.

Part III: Students are within nine months of graduation at the time of the examination. Students must have passed all of the Part I to be eligible.

Part IV: Students will be able to submit an application for Part IV if they passed all of Part I and will be within six months of graduation by the exam date.

If a student does not meet the criteria for a given part (missing course or courses), the student may request a review of their application for possible exception. This official request is submitted to the Assistant Vice President for Chiropractic (form obtained in the Registrar's Office), before the deadline of the application that is due to the NBCE. It favorable, the application will be certified for eligibility.

Note: NBCE application procedures and deadlines are strictly enforced. Completed applications (except for Registrar processing) must be submitted to the Registrar on time to be processed before the application deadline. Questions regarding the application process and deadline dates should be directed to the Registrar's office.

State Board Examinations

Eligibility criteria, application procedures, and deadlines vary from state to state. Required documentation may include notarization, certification by college registrar, photos, official transcripts (chiropractic and/or pre-professional), etc. The Registrar's office should be consulted for additional information.

Transitions Ceremony

The purpose of the Transitions Ceremony is to create a meaningful milestone for the seventh-trimester chiropractic student that honors the matriculation to the next phase of their education to the clinical experience. During the Transitions Ceremony, recipients of Academic Awards, Community Awards, and Scholarship Awards will be announced.

SAMPLE SCHEDULE – STUDENTS ENROLLED STARTING IN SEPTEMBER 2025
DOCTOR OF CHIROPRACTIC CURRICULUM

		Lecture Hours	Lab Hours	Contact Hours	Credits Hours
First Trimester					
ANA 6115	Histology	2	2	60	3
ANA 6120	Embryology	1	0	15	1
ANA 6145	Axial Skeletal and Gross Anatomy of the Back and Thorax	3	4	105	5
ANA 6150	Functional Neuroanatomy	4	2	90	5
BCH 6110	Principles of Biochemistry	3	0	45	3
HCA 6110	Introduction to Patient Care	0	1	15	0.5
PHL 6125	Essentials of Professional Development	1	0	15	1
PHL 6130	Foundations and History of Chiropractic	1	0	15	1
PHY 6110	Cell Physiology	1	0	15	1
TCH 6115	Introduction to Palpation	0	2	30	1
TCH 6120	Introduction to Technique: Development of Psychomotor Skills	0	2	30	1
TOTAL		**16**	**13**	**435**	**22.5**
Second Trimester					
ANA 6210	Gross Anatomy of the Extremities	3	4	105	5
ANA 6220	Clinical Neuroanatomy	4	2	90	5
BCH 6210	Nutrition and Metabolism	3	0	45	3
HCA 6210	Introduction to Integrative Healthcare	0	1	15	0.5
PHL 6210	Research Inquiry	1	0	15	1
PHY 6210	Foundations of Systems Physiology	3	0	45	3
RAD 6210	Normal Imaging of the Spine and Extremities	0	3	45	1.5
TCH 6210	Introduction to Spinal Assessment and Manipulation	1	4	75	3
TOTAL		**15**	**14**	**435**	**22**
Third Trimester					
ANA 6310	Gross Anatomy – Abdominopelvic Viscera / Head Neck	3	4	105	5
HCA 6310	Essentials of Patient Documentation	0	1	15	0.5
MPH 6310	Clinical Microbiology	4	0	60	4
PHY 6310	Principles of Systems Physiology	3	0	45	3
PHY 6320	Principles of Physiopathology	4	2	90	5
RAD 6310	Cross-Sectional Imaging Anatomy	0	2	30	1
TCH 6310	Spinal Assessment and Manipulation of the Pelvis and Lumbar Spine	0	4	60	2
TCH 6320	Lower Extremity Assessment and Manipulation	0	2	30	1
TCH 6330	Foundations of Biomechanics	2	0	30	2
TOTAL		**16**	**15**	**465**	**23.5**

Fourth Trimester

DIA 6415	Orthopedic and Neurological Assessment	2	4	90	4
DIA 6420	Musculoskeletal Pathology with Correlative Imaging	3	2	75	4
HCA 6410	Clinical Applications I – Patient History and Motivational Interviewing	0.5	1	22.5	1
MPH 6410	Public Health	2	0	30	2
PHL 6420	Principles of Chiropractic	2	0	30	2
PHL 6430	Literature Review	1	0	15	1
PHY 6410	Systems Pathology	4	2	90	5
TCH 6410	Spinal Assessment and Manipulation of the Thoracic Spine and Ribs	0	4	60	2
TCH6420	Upper Extremity Assessment and Manipulation	0	2	30	1
TOTAL		**14.5**	**15**	**442.5**	**22**

Fifth Trimester

DIA 6520	Rheumatology	2	2	60	3
DIA 6525	Clinical Laboratory Diagnosis	2	2	60	3
DIA 6530	Clinical Neurology	2	0	30	2
DIA 6545	Diagnosis and Management of Spinal Disorders	4	2	90	5
HCA 6510	Clinical Applications II – Examination of Spinal Conditions	0	1	15	0.5
PHL 6510	Research Methodology and Project Proposal	2	0	30	2
PHL 6520	The Scientific Basis for Chiropractic Care	1	0	15	1
TCH 6511	Spinal Assessment and Manipulation of the Cervical Spine	0	4	60	2
TCH 6515	Myofascial Therapy I – Spine	0	2	30	1
TCH 6516	Physical Rehabilitation of Spinal Disorders	1	2	45	2
TCH6517	Therapeutic Modalities	1	2	45	2
TOTAL		**15**	**17**	**480**	**23.5**

Sixth Trimester

AST 6615	Clinical and Development Nutrition	3	0	45	3
AST 6625	Emergency Procedures	0.2	0.6	15	0.5
DIA 6635	General Diagnosis	4	4	120	6
DIA 6625	Diagnosis and Management of Extremity Disorders	4	2	90	5
DIA 6630	Clinical Decision Making in Spinal Disorders	0	4	60	2
HCA 6610	Clinical Applications III – Comprehensive Physical Examinations	0	1	15	0.5
PHL 6610	Ethics, Professionalism, and Jurisprudence	2	0	30	2
TCH 6611	Chiropractic Management of Disc Disorders	0	2	30	1
TCH 6613	Physical Rehabilitation of Extremity Disorders	1	2	45	2
TCH 6614	Myofascial Therapy II – Extremities	0	2	30	1
TOTAL		**14.2**	**17.6**	**480**	**23**

Seventh Trimester					
AST 6720	Clinical Psychology	2	0	30	2
AST 6730	Clinical Pharmacology	3	0	45	3
AST 6740	Health Promotion and Wellness	2	0	30	2
BPM 6715	Introduction to Coding and Billing	1	0	15	1
BPM 6720	Roadmap to Practice	1	0	15	1
CLS 6750	Pre-Clerkship	1	4	75	3
DIA 6710	Maternity and Pediatric Evaluation and Management	3	0	45	3
DIA 6715	Clinical Decision-Making Capstone	0	4	60	2
DIA6720	Geriatric Evaluation and Management	1	0	15	1
RAD 6710	Radiographic Science and Radiographic Examination	2	2	60	3
RAD 6720	Ultrasonographic Imaging	0	2	30	1
TCH6710	Integrative Strategies in Manual Therapy	0	2	30	1
TOTAL		**16**	**14**	**450**	**23**
Eighth Trimester					
AST 6815	Biopsychosocially Oriented Clinical Practice	2	0	30	2
AST 6825	Team-Based and Collaborative Care	1	0	15	1
BPM 6815	Strategic Applications in Business and Practice Management	3	0	45	3
CLS 6850	Clinical Clerkship - Community Clinic and Rotations I	0	20	300	10
CLS 6860	Grand Rounds and Case Reviews	1	0	15	1
DIA 6810	Clinical Laboratory Evaluation	1	0	15	1
HCA 6810	Patient Education	1	0	15	1
RAD 6810	Clinical Evaluation Imaging	2	0	30	2
TOTAL		**11**	**20**	**465**	**21**
Ninth Trimester					
AST 6910	Diversity and Transcultural Competencies	1	0	15	1
BPM 6910	Marketing and Public Relations Strategies	2	0	30	2
BPM 6915	Financing and Budgeting in Healthcare Administration	2	0	30	2
CHS 6910	Clinical Competency Capstone	0	2	30	1
CLS 6950	Clinical Clerkship - Community Clinic and Rotations II	0	20	300	10
CLS 6960	Grand Rounds - Advanced and Complex Cases	1	0	15	1
DIA6910	Ergonomics and Occupational Health	2	0	30	2
TOTAL		**8**	**22**	**450**	**19**
Tenth Trimester					
BPM 7110	Office Operations and Procedures	2	0	30	2
BPM 7115	Advanced Billing and Coding	2	0	30	2
CLS 7150	Clinical Clerkship – Distinction Program	0	20	300	10
DIA 7110	Post-Surgical Care	2	0	30	2
DIA 7115	Special Examinations	1	0	15	1
TOTAL		**7**	**20**	**405**	**17**
TOTAL CORE HOURS		**132.7**	**167.6**	**4507.5**	**216.5**
TOTAL ELECTIVE COURSE HOURS		**6**		**90**	**6**
(A minimum of 6 elective credit hours must be completed after completion of 4th trimester coursework)					
TOTAL PROGRAM HOURS		**138.7**	**167.6**	**4597.5**	**222.5**

ANA 6115 **60 hours, 3 credits**
Histology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will introduce students to the microscopic organization and structure of human tissues and cell biology. The normal histology of epithelia, connective tissue, cartilage and bone, blood, muscle, nervous system, circulatory system, lymphatic system, endocrine system, digestive system, integument system, respiratory system, urinary system, and reproductive system will be discussed.

ANA 6120 **15 hours, 1 credit**
Embryology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

In this course, students will progressively be introduced to the developmental events that occur during embryogenesis, starting with gametogenesis, fertilization, and early embryo development, followed by the events during weeks 3 to 8 (embryonic period) and the development of the gut tube and body cavities, ending with the third month through birth and the placenta. Lastly, a systems-based discussion of all major systems, including special sense organs will be presented.

ANA 6145 **105 hours, 5 credits**
Gross Anatomy of the Back, Thorax, and Axial Skeleton
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: ANA 6210, ANA 6310, RAD 6210, RAD 6310

Gross anatomy I is part of an integrated sequence of courses. This first course will cover the gross anatomy of the trunk including osteology, arthrology, muscle action, innervation and blood supply. Heavy emphasis will be placed on musculoskeletal anatomy, neurovascular anatomy, and organs of the back and thorax.

ANA 6150 **90 hours, 5 credits**
Functional Neuroanatomy
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: ANA 6220

A multidisciplinary approach to neuroscience that integrates relevant topics in anatomy and physiology. Lectures will be supplemented by laboratory exercises in neuroanatomy and neurology, with an emphasis on clinical correlation and an introduction to the use of case studies. External anatomy and function of the spinal cord, brainstem, cerebellum, diencephalon and cerebrum will be explored. The neuroanatomical and neurophysiological basis of chiropractic practice will also be discussed.

ANA 6210 **105 hours, 5 credits**
Gross Anatomy of the Extremities
Prerequisite(s): ANA 6145
Corequisite(s): RAD 6210
Prerequisite for: RAD 6310, TCH 6320, TCH 6420

This course will present all the anatomy associated with the upper and lower extremities in a lecture and cadaveric dissection laboratory format. Topographical anatomy, dermatomes, lymphatics and blood supply will also be covered.

ANA 6220 **90 hours, 5 credits**
Clinical Neuroanatomy
Prerequisite(s): ANA 6150
Corequisite(s): None
Prerequisite for: ANA 6310, DIA 6530

A multidisciplinary approach, integrating relevant topics in Neuroanatomy and Neurophysiology with more extensive coverage of neurological diagnosis. Lectures will be supplemented by lab exercises in Neuroanatomy, again with an emphasis on clinical correlation and cross sections and imaging. Numerous case studies will be examined in both lecture and laboratory. The Neuroanatomical and Neurophysiological basis of chiropractic practice will also be explored.

ANA 6310 **105 hours, 5 credits**
Gross Anatomy – Abdominopelvic Viscera / Head & Neck
Prerequisite(s): ANA 6145, ANA 6220
Corequisite(s): RAD 6310
Prerequisite for: DIA 6415

This course will present the student with all the anatomy of the abdominal wall, pelvis, perineum and organs contained therein. Head and neck anatomy will also be presented. Topographical anatomy, dermatomes, lymphatics and blood supply will be covered.

AST 6615 **45 hours, 3 credits**
Clinical and Developmental Nutrition
Prerequisite(s): BCH 6210
Corequisite(s): None
Prerequisite for: None

A course that develops foundational knowledge in clinical and developmental nutrition and the impact nutrition has on improving human health. Evidenced-based nutrition assessment, proper food selection and supplemental recommendations are emphasized to enable a chiropractor to develop an individualized therapeutic program to address age related or chronic diseases. Evidence-based nutritional support for the general health of the patient on medication will be presented with emphasis on the importance of drug interactions.

AST 6625 **15 hours, 0.5 credits**
Emergency Procedures
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to prepare students to recognize and provide an effective response to the most common medical emergencies in the workplace and the community. Effective communication relating to coordination of an emergency response and knowledge and proficiency in CPR/ AED and first aid will be emphasized. Students will learn to perform the necessary interventions in situations of cardiopulmonary arrest, poisoning, thermal injuries, shock, head and spinal injuries, choking and airway obstruction, as well as the emergency management of common athletic injuries such as fractures, dislocations, strains and sprains.

AST 6720
Clinical Psychology **30 hours, 2 credits**
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on a biological and psychosocial perspective on human behavior and its application in clinical practice. General concepts, psychological assessment, mental/emotional disorders, including standardized diagnostic screening tools and criteria and behavioral management strategies are covered.

AST 6730 **45 hours, 3 credits**
Clinical Pharmacology
Prerequisite(s): BCH 6210
Corequisite(s): None
Prerequisite for: None

This course provides students with an overview of pharmacology and toxicology with an emphasis on clinical applications within the context of chiropractors. The course helps with the prioritization of patients' needs under the biopsychosocial framework. The course is designed to familiarize the student with the most used pharmaceuticals, their actions, indications, contraindications, and side effects for the management of the most prevalent chronic conditions through evidence-based learning.

AST 6740 **30 hours, 2 credits**
Health Promotion and Wellness
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides an overview of strategies employed by healthcare providers to help reduce the risk of chronic diseases and disabilities. Current health information education and screening tools are discussed. The role and effectiveness of behavioral interventions and lifestyle modifications to improve the health and wellness of a person (patient) and the health of the community are also presented. Utilizing government sources and other evidence-based literature, students will learn trends in vulnerable populations and patient-centered collaborative approaches best suited to address these gaps in healthcare outcomes.

AST 6815 **30 hours, 2 credits**
Biopsychosocially Oriented Clinical Practice
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course that presents an overview of the biopsychosocial (BPS) model in management of musculoskeletal conditions in a chiropractic practice with an emphasis on spine related disorders. The BPS approach to clinical management addresses not only the biological source of a spine related disorder, but also the psychological (thoughts, emotions, behaviors), and social (socio-economic, socio-environmental, cultural) factors that may influence or perpetuate a pain condition. This supports a community wide approach to patient empowered healthcare through the first messages received, whether as an independent practitioner, or in an interprofessional collaborative setting.

AST 6825 **15 hours, 1 credit**
Team-Based and Collaborative Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course prepares the future Doctor of Chiropractic to work collaboratively within a team environment to integrate clinical care and optimize patient outcomes. Recognition of the cultures, roles, expertise, and values of other health professions, as well as patients is stressed. Students will develop the skills necessary to engage and develop interprofessional relationships, to understand team dynamics, and to communicate effectively as part of a team approach to patient-centered care.

AST 6910 **15 hours, 1 credit**
Diversity and Transcultural Competence
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is intended to help students analyze the strong link between health outcomes and issues of human diversity through the lens of race, immigration status, gender, ethnicity, ability, language, sexual orientation, socioeconomic status, community, health literacy and language barriers, access to resources and their collective impact on health behaviors. It refines student's understanding of the underline causes of health, wellness, and illness. It broadens the student's perspective regarding health inequality and access to services. It will allow to evaluate each determinant and the impact in population health. Students will use scientific literature of social sciences to identify and interpret how determinants inform practitioners in their understanding and treatment of diverse patient populations. Course discussions will bring awareness to each student's personal biases that may impact the delivery of care.

BCH 6110 **45 hours, 3 credits**
Principles of Biochemistry
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BCH 6210, PHY 6210

This course introduces the basic chemical components found in the diet and/or utilized by the body. The structure and major biochemical functions of carbohydrates, lipids, nucleic acids, proteins, hormones and vitamins are explored.

BCH 6210 **45 hours, 3 credits**
Nutrition and Metabolism
Prerequisite(s): BCH 6110
Corequisite(s): None
Prerequisite for: AST 6615, AST 6730

This is a course describing the major biochemical pathways of carbohydrates, lipids, nucleic acids and protein synthesis. The relationship of these mechanisms to nutrition, physiological processes and to the health of the human body is stressed. Nutritional deficiencies and the resulting clinical consequences are introduced.

BPM 6715 **15 hours, 1 credit**
Introduction to Coding and Billing
Prerequisite(s): HCA 6310
Corequisite(s): None
Prerequisite for: BPM 7115

This course provides students with an introduction to coding and billing requirements and strategies to successfully receive reimbursement for their professional services from third-party payers. Topics covered include how to accurately use diagnostic and procedure codes and how to efficiently document care in order to minimize legal liability and delays or denials of insurance claims.

BPM 6720 **15 hours, 1 credit**
Roadmap to Practice
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BPM 6815

This course details the logical steps necessary to transition from chiropractic student to solo practitioner, associate, independent contractor, or partner within a multidisciplinary healthcare setting. Students apply effective principles of goal setting and develop a sound foundation for assertive decision-making and fostering professional relationships. Application of coursework culminates with the generation of a professional practice portfolio specifying licensure, credentialing, involvement with state and provincial associations, and compliance requirements as a guiding collection of documents specific to the context of the future practitioner.

BPM 6815 **45 hours, 3 credits**
Strategic Applications in Business and Practice Management
Prerequisite(s): BPM 6720
Corequisite(s): None
Prerequisite for: BPM 7110

Chiropractors possess the option of practicing in several different scenarios from solo practice, associateship, specialty, or multi-disciplinary settings. This course employs practical applications of principles of entrepreneurship through self-selection from a variety of learning modules specific to the student's individual practice goals. Topics include examination of business entities and their structure, performing market needs analyses, requirements of managing the revenue cycle, compliance regulations, human resource management, contract negotiation, maintaining electronic health records, and general business processes inherent in chiropractic practice management. Through readings, lectures, discussions and case analysis, students will develop practical insights into the nature of chiropractic practice as well as anticipate potential problems and resolve conflicts while maintaining financial viability and growth.

BPM 6910 **30 hours, 2 credits**
Marketing and Public Relations Strategies
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course cultivates student's understanding of the value of an integrated publicity and promotions strategy to bring awareness to chiropractic's tangible benefits through the paradigms of public relations, marketing, advertising, and sale of services. Students will build and utilize a practical repertoire of communication techniques ranging from public speaking, traditional and digital advertising, and social media content creation, to execute effective message design and marketing strategies. Using specific case examples, students will implement within their business plan market and trend analysis vital to the successful growth of their practice.

BPM 6915 **30 hours, 2 credits**
Financing and Budgeting in Healthcare Administration
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides future practitioners a framework for addressing fiscal management of a chiropractic healthcare enterprise while striving to increase their understanding of the unique aspects of issues faced in healthcare finance. Students will employ a practical approach in identifying, analyzing, and making budgetary and financial recommendations to benefit the ongoing operations of a healthcare entity. Topics include securing and managing of funds, reimbursement systems, implementing tax-friendly decisions and documentation, preparation and processing of budgets, revenue projection, debt management and expenditure control, and risk management to make responsible managerial decisions.

BPM 7110 **30 hours, 2 credits**
Office Operations and Procedures
Prerequisite(s): BPM 6815
Corequisite(s): None
Prerequisite for: None

This course focuses on the essential business practices necessary to oversee the operations of a productive chiropractic practice. The coursework is divided into two domains; 1) Development and implementation of an office policy and procedures manual to define employee roles and tasks, facilitate the training of staff, clarify key responsibilities (e.g., HIPAA, emergency protocols, patient scheduling, office maintenance, and inventory management) and 2) Development of a clinic health evaluation system to collect and analyze key business

performance indicators to improve patient outcomes and business success.

BPM 7115 **30 hours, 2 credits**
Advanced Billing and Coding
Prerequisite(s): BPM 6715
Corequisite(s): None
Prerequisite for: None

This course provides students with an in-depth understanding of the American Health Care System and strategies to successfully receive reimbursement for their professional services from third-party payers. Topics covered include how to analyze the reimbursement environment before beginning a practice in a particular geographic area; how to accurately use diagnostic and procedure codes; how to efficiently document care in order to minimize legal liability and delays or denials of insurance claims; and how to create a rational fee schedule for a chiropractic practice. Students will gain first-hand experience in billing and coding that they will be able to apply immediately when they begin their chiropractic practices.

CHS 6910 **30 hours, 1 credit**
Clinical Competency Capstone
Prerequisite(s): CLS 6850
Corequisite(s): None
Prerequisite for: None

A course performed in a clinical setting focused on the refinement and demonstration of clinical skills at a level that meets or exceeds the program intended clinical competencies. Through active participation in patient care and various assessment methods, including practical examinations, students will demonstrate their knowledge, skills, and attitudes in alignment with the Program Learning Outcomes.

CLS 6750 **75 hours, 3 credits**
Pre-Clerkship
Prerequisite(s): DIA 6635, HCA 6610
Corequisite(s): DIA 6715
Prerequisite for: CLS 6850, CLS 6860, HCA 6810

This course is designed to integrate all the principles and practical application of patient care developed in prior courses with refinement of documentation procedures in a campus clinical environment. Students will also have the opportunity to choose their area of focus for their clinical distinction experience.

CLS 6850 **300 hours, 10 credits**
Clinical Clerkship – Community Clinic and Rotations I
Prerequisite(s): CLS 6750, DIA 6715, RAD 6710, RAD 6720, TCH 6710
Corequisite(s): None
Prerequisite for: CHS 6910, CLS 6950

The first clerkship course is a comprehensive practical experience where students are immersed in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

CLS 6860 **15 hours, 1 credit**
Grand Rounds and Case Reviews
Prerequisite(s): CLS 6750
Corequisite(s): None
Prerequisite for: CLS 6960

A course designed to challenge students in the interpretation of patient history findings, diagnostic tests, clinical reasoning, and the development of treatment plans using case-based learning exercises and patient case studies.

CLS 6950 **300 hours, 10 credits**
Clinical Clerkship – Community Clinic and Rotations II
Prerequisite(s): CLS 6850
Corequisite(s): None
Prerequisite for: CLS 7150

The second clerkship course builds on the skills developed in prior clinical experiences. The students continue their comprehensive immersion in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

CLS 6960 **15 hours, 1 credit**
Grand Rounds – Advanced and Complex Cases
Prerequisite(s): CLS 6860
Corequisite(s): None
Prerequisite for: None

In this clinical course, students will be exposed to higher levels of complex cases and will participate in the interpretation of patient history findings, diagnostic tests, clinical reasoning, and the development of treatment plans using case-based learning exercises and patient case studies. Students will also be expected to collect and support each case with evidence-based practices.

CLS 7150 300 hours, 10 credits
Clinical Clerkship – Distinction Programs
Prerequisite(s): CLS 6950
Corequisite(s): None
Prerequisite for: None

The third clerkship course builds on the skills developed in prior clinical experiences. The students continue their comprehensive immersion in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

DIA 6415 90 hours, 4 credits
Orthopedic and Neurological Assessment
Prerequisite(s): ANA 6310, HCA 6310, TCH 6330
Corequisite(s): HCA 6410
Prerequisite for: DIA 6530, DIA 6545, DIA 6625, HCA 6510, HCA 6610, TCH 6516

This course introduces students to the physical orthopedic and neurological assessment techniques of the brain, spine, and extremities. The students will learn to perform evidence-based physical examinations, to recognize positive signs and symptoms, and to critically analyze the examination findings to inform the diagnosis, treatment plan, and prognosis of orthopedic and neurological conditions commonly encountered in a chiropractic practice.

DIA 6420 75 hours, 4 credits
Musculoskeletal Pathology with Correlative Imaging
Prerequisite(s): PHY 6320, RAD 6310
Corequisite(s): None
Prerequisite for: DIA 6520, DIA 6525, DIA 6545, RAD 6720

This course focuses on the study of abnormal pathophysiological manifestations of conditions encountered in a chiropractic practice. Correlation between the pathogenesis, cellular events of disease progression, and the macroscopic and clinical manifestations of diseases is emphasized. Students are introduced to categories of musculoskeletal conditions, such as congenital and inherited dysplasias, infections, arthritides, hematological and blood disorders, nutritional, endocrine, and metabolic conditions, and neoplastic and tumor-like disorders. The descriptive terminology and characteristic appearances of the pathologies is emphasized primarily through the use of diagnostic imaging studies.

DIA 6520 60 hours, 3 credits
Rheumatology
Prerequisite(s): DIA 6420
Corequisite(s): DIA 6525
Prerequisite for: DIA 6625

This course is designed to expand the practical knowledge of students with the diagnosis and management of rheumatological disorders. Students will learn to recognize and differentiate patterns of disease, levels of progression, correlate laboratory, and imaging examinations findings, consider extra-skeletal manifestations, and will discuss preferred management options, including advanced testing, specialty referrals, and indications and contraindications for chiropractic manipulations.

DIA 6525 60 hours, 3 credits
Clinical Laboratory Diagnosis
Prerequisite(s): DIA 6420, PHY 6410
Corequisite(s): DIA 6520, DIA 6545
Prerequisite for: DIA 6635, DIA 6810

This course focuses on the pathophysiologic basis and clinical interpretation of diagnostic laboratory tests. Emphasis is placed upon the clinical presentation and relevant laboratory findings in order to establish a differential or definitive diagnosis. Routine lab testing – including urinalysis, CBC, blood chemistries, serology, and immunology – will be presented. Advanced and specialized laboratory procedures are also introduced. Techniques and procedures for venipuncture / phlebotomy are presented and performed in the laboratory portion.

DIA 6530 30 hours, 2 credits
Clinical Neurology
Prerequisite(s): ANA 6220, DIA 6415
Corequisite(s): DIA 6545, TCH 6516
Prerequisite for: None

This course covers common neurologic symptoms and disorders with special focus on conditions likely to be seen in a chiropractic office. Emphasis will be placed on developing a practical, systematic approach to the recognition, evaluation and differential diagnosis of common neurologic signs, symptoms, and disorders.

DIA 6545 90 hours, 5 credits
Diagnosis and Management of Spinal Disorders
Prerequisite(s): DIA 6415, DIA 6420, HCA 6410
Corequisite(s): DIA 6525, DIA 6530, TCH 6516
Prerequisite for: DIA 6630, DIA 6810, HCA 6610, RAD 6810, TCH 6611, TCH 6710

This course focuses on the development of clinical skills related to the diagnosis and management of spinal conditions commonly presenting in a chiropractic office. For each condition, students will explore the findings of patient history, physical examination, diagnostic imaging, clinical laboratory, and other ancillary testing to establish a diagnosis and/or differential. This will include the identification and recognition of signs and symptoms that warrant additional examinations or referrals to other providers. Evidence-informed patient management plans are discussed for each condition.

DIA 6635 120 hours, 6 credits
General Diagnosis
Prerequisite(s): DIA 6525, HCA 6410, PHY 6410
Corequisite(s): HCA 6610
Prerequisite for: CLS 6750, DIA 6710, DIA 6720, DIA 6810, RAD 6810

This course focuses on the diagnosis and management of non-neuromusculoskeletal conditions which may present to the chiropractor's office for an initial diagnosis. Emphasis is placed on the development and practical application of history taking, selecting appropriate diagnostic examination procedures, formulating a differential diagnosis, and interpreting examination data to formulate a final diagnosis. Appropriate treatment and co-management plans will be emphasized. The laboratory segment of the course will focus on the physical examination skills of the integumentary, respiratory, cardiovascular, gastrointestinal, genitourinary, and endocrine systems, in addition to a survey of common diagnostic imaging findings of diseases of the thorax, abdomen and pelvis.

DIA 6625 90 hours, 5 credits
Diagnosis and Management of Extremity Disorders
Prerequisite(s): DIA 6415, DIA 6520
Corequisite(s): TCH 6613
Prerequisite for: DIA 6810, RAD 6810

This course is focused on the development of clinical skills related to the diagnosis and management of extremity conditions commonly presenting in a chiropractic office. For each condition, students will explore the findings of patient history, physical examination, diagnostic imaging, clinical laboratory, and other ancillary testing to establish a diagnosis and/or differential. This will include the identification and recognition of signs and symptoms that warrant additional examinations or referrals to other providers. Evidence-informed patient management plans are discussed for each condition.

DIA 6630 60 hours, 2 credits
Clinical Decision Making in Spinal Disorders
Prerequisite(s): DIA 6545
Corequisite(s): None
Prerequisite for: DIA 6715

This course will develop the skills of the student clinician in the application of problem-focused history taking, physical examination procedures, ordering and interpretation of appropriate testing such as diagnostic imaging and clinical laboratory. Students will be exposed to real-life cases and case simulations focused on spinal conditions. The information collected and analyzed during the patient examination will result in the development of a reasonable differential diagnosis and working diagnosis. An evidence-informed conservative management plan will be developed related to each clinical scenario.

DIA 6710 45 hours, 3 credits
Maternity and Pediatric Evaluation and Management
Prerequisite(s): DIA 6635
Corequisite(s): DIA 6720, TCH 6710
Prerequisite for: DIA 6820

This course focuses on the diagnosis and management of conditions commonly encountered in the chiropractic practice affecting the pediatric population and pregnant and postpartum mothers. Normal physiological development and changes during these stages of life are discussed with an emphasis on recognizing those disorders necessitating referral or co-management and where chiropractic care of the individual is applicable.

The importance of interprofessional collaboration in the care of pediatric and pregnant patients will be addressed.

A two-hour online course on mandated child abuse reporter training is included with mandatory completion needed for graduation and licensure in New York State.

DIA 6715 60 hours, 2 credits
Clinical Decision-Making Capstone
Prerequisite(s): DIA 6630
Corequisite(s): CLS 6750
Prerequisite for: CLS 6850

This course provides an opportunity for students to refine and demonstrate their clinical reasoning skills regarding the application of problem-focused history taking, physical examination procedures, ordering and interpretation of appropriate testing such as diagnostic imaging and clinical laboratory. Students are exposed to real-life cases and case simulations focused on systemic or neuromusculoskeletal conditions. The information collected and analyzed during the patient examination will result in the development of a reasonable differential diagnosis and working diagnosis. Students will demonstrate the ability to develop and present an evidence-informed conservative management plan for each clinical scenario explored in the course.

DIA 6720 15 hours, 1 credit
Geriatric Evaluation and Management
Prerequisite(s): DIA 6635
Corequisite(s): DIA 6710, TCH 6710
Prerequisite for: None

This course is designed to train students in the foundations of geriatric patient care. The course presents the unique health care needs of older adults, discusses the clinical presentation and diagnosis of common conditions affecting elderly patients with emphasis on recognizing those disorders necessitating referral or co-management. Where chiropractic care of the individual is applicable, modifications to the delivery of the adjustment will be discussed.

DIA 6810 15 hours, 1 credit
Clinical Laboratory Evaluation
Prerequisite(s): DIA 6525, DIA 6545, DIA 6635, DIA 6625
Corequisite(s): None
Prerequisite for: None

This course focuses on the interpretation of diagnostic laboratory examinations of real and simulated case studies. Students will refine their knowledge of laboratory studies and clinical decision-making appropriate to the roles of chiropractors as they order exams and analyze the results of routine lab testing including urinalysis, CBC, blood chemistries, serology, and immunology, as well as advanced or specialized studies. Special emphasis is placed on health screenings, early diagnosis, and the importance of interprofessional collaboration in the management of patient conditions that fall outside the traditional scope of practice of chiropractors.

DIA 6910 30 hours, 2 credits
Ergonomics and Occupational Health
Prerequisite(s): TCH 6330
Corequisite(s): None
Prerequisite for: None

In this course, students will learn to evaluate a physical work environment and provide recommendations on modifications of that environment to prevent repetitive injuries and promote healthy behaviors. Course discussions will include work safety and/or prevention programs. Classes will include lectures and practical exercises, with emphasis on integrating previously accumulated knowledge and skills with those developed in the course.

DIA 7110 30 hours, 2 credits
Post-Surgical Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on the clinical evaluation and management of post-surgical patients. Students will discuss common surgical interventions of the spine and extremities that may be observed in a chiropractic practice and will explore how these surgical procedures may modify treatment plans. An emphasis is placed on pre-surgical candidate selection and preparation, collaborative care, disability prevention, self-care strategies and non-pharmacological management of musculoskeletal and/or neurologically mediated pain.

DIA 7115 15 hours, 1 credit
Special Examinations
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on the role of advanced diagnostic procedures and special examinations commonly encountered in a chiropractic practice. Students will explore the clinical indications, contraindications, and other requirements related to special examinations. Discussions will include electromyography and nerve conduction studies, impairment ratings, department of transportation examinations, and other specialized or advanced examinations.

HCA 6110 15 hours, .5 credit
Introduction to Patient Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to review the role of chiropractors as essential providers within the US and Canadian Healthcare systems, the expectations of professionalism in patient care settings, patient privacy training and to introduce students to various professional chiropractic organizations. There will be opportunities for students to shadow in a chiropractic office, to receive chiropractic care, and to participate as a simulated patient for upper-level students.

HCA 6210 15 hours, .5 credit
Introduction to Integrative Healthcare
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to introduce students to different medical specialties and integrative environments to include office and hospital procedures. There will be opportunities for students to shadow other healthcare disciplines or integrated settings. Students will continue to participate as simulated patients for upper-level students.

HCA 6310 15 hours, .5 credit
Essentials of Patient Documentation
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BPM 6715, DIA 6415, HCA 6410

A course where students will be introduced to the basics of all patient files, best practices of documentation in electronic health records utilized in the Northeast College health centers. Students will continue to gain clinical experience by shadowing chiropractic providers and participating as simulated patients for upper-level students.

HCA 6410 22.5 hours, 1 credit
Clinical Applications I – Patient History and Motivational Interviewing
Prerequisite(s): HCA 6310
Corequisite(s): DIA 6415
Prerequisite for: DIA 6545, DIA 6635, HCA 6510

This course introduces students to the techniques required to perform a complete and systematic case history to help inform the patient examination and identify the need for referrals to other providers. As a first line communication with the patient, students will learn ethical patient-centered practices of motivational interviewing to build rapport, engage patients in their care, and maximize patient outcomes. The course also introduces the concepts of professional behaviors, liability and risk-management strategies, and the importance of sociocultural factors in the patient interview.

HCA 6510 15 hours, .5 credit
Clinical Applications II – Examination of Spinal Conditions
Prerequisite(s): DIA 6415, HCA 6410
Corequisite(s): None
Prerequisite for: HCA 6610

This course is designed for students to apply health center examination and documentation procedures with a focus on spine care. Students will apply clinical skills learned in multiple courses to the clinical environment, including orthopedic, neurological, and chiropractic examinations and the development of case management plans. Special consideration of co-management of cases with other providers will be introduced.

HCA 6610 15 hours, .5 credit
Clinical Applications III – Comprehensive Physical Examinations
Prerequisite(s): DIA 6415, DIA 6545, HCA 6510
Corequisite(s): DIA 6635
Prerequisite for: CLS 6750

This course is designed for students to apply health center procedures with a focus on the physical assessment, documentation, diagnosis, and early development of a management plan in a simulated clinical environment. Students will apply the clinical skills learned in multiple courses, including general

physical examinations, specific orthopedic, neurological and vascular examinations of the spine and extremities and the development of case management plans. Special considerations for active care and rehabilitation will be emphasized in the clinical environment.

HCA 6810 **15 hours, 1 credit**
Patient Education
Prerequisite(s): CLS 6750
Corequisite(s): None
Prerequisite for: None

This course is designed to foster practical application of patient education procedures in a health center environment as a key component of patient-centered care. The students will be engaged in evidence-based practices of patient education for the self-management of acute and chronic neuromusculoskeletal pain, osteoarthritis-related disorders, inflammatory conditions, injury and fall prevention, disability prevention, mental health screening, and to motivate patients towards adopting general lifestyle behavioral changes. Counseling of patients related to fear-avoidance beliefs and other components of the biopsychosocial model of care will be emphasized.

MPH 6310 **60 hours, 4 credits**
Clinical Microbiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on the structure, biochemistry, and genetics of organisms associated with human infectious disease. The immune system will be introduced. Cells of the immune system, antigens, antibodies and complements will be discussed. Hypersensitivity and immunopathologies will be covered along with immunizations and vaccinations. Modes of transmission, epidemiology, mechanisms of specific and nonspecific host resistance, methods of disinfection and prevention are emphasized.

MPH 6410 **30 hours, 2 credits**
Public Health
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course examines the concepts, methods, and practices for assessing the health of a community. Topics include measuring population health status, the historical impact of public health interventions, potential barriers to improving health, developing community health profiles, identifying the social determinants of health, and the utilization of community health assessment in developing public health interventions. There will be discussions on government agencies involved in overseeing public health. Emphasis will be on how the chiropractor can relate to these topics and be a public health change agent in their community.

PHL 6125 **15 hours, 1 credit**
Essentials of Professional Development
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed for students entering the Doctor of Chiropractic program to support the students' development as a healthcare provider and expand their understanding and appreciation of the expectations as a member of the Chiropractic profession. The course provides an overview of the program resources, academic expectations, and professional responsibilities of a Northeast student and a future healthcare provider. Students will learn about how social, economic, and cultural factors affect healthcare and currently impact various groups.

PHL 6130 **15 hours, 1 credit**
Foundations and History of Chiropractic
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A course in which the history of chiropractic is traced from its origins to the present day. The basic concepts of chiropractic philosophy as they were originally formulated and as they have evolved to present-day scientific thinking are discussed at length.

PHL 6210 **15 hours, 1 credit**
Research Inquiry
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHL 6430

This course introduces students to the concepts and structure of developing a clinical research question. Students will learn to apply best practices in information literacy in order to locate, evaluate and integrate research for discussions on chiropractic and integrative care. A

significant portion of the course will focus on crafting search strategies by breaking clinical questions down into Patient population, intervention, comparison, outcome (PICO) elements and using Boolean logic to identify articles in library databases. The levels of scientific evidence will be introduced and used to assess articles.

PHL 6420 **30 hours, 2 credits**
Principles of Chiropractic
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course explores the scientific reasons for the benefits of the chiropractic profession and paradigm. Historical and current hypotheses about chiropractic subluxations/joint dysfunctions are examined, as well as the scientific evidence supporting these hypotheses. Proposed etiologies of subluxations/joint dysfunctions, as well as possible mechanisms to explain why chiropractic adjusting/manipulation succeeds in improving health and wellness are investigated.

PHL 6430 **15 hours, 1 credit**
Literature Review
Prerequisite(s): PHL 6210
Corequisite(s): None
Prerequisite for: PHL 6510

This course will expand upon the concepts of Research Inquiry and develop the skills needed to critically appraise the scientific literature and identify gaps of knowledge. Students will be asked to perform a literature review based on their previously developed clinical question, locate the appropriate literature, and then critically appraise and summarize the key finding identified in the literature. Using the levels of evidence as a guide each study type will be broken down into key elements. The concept of reliability and validity will be explored as it relates to scientific investigation. Students will be asked to identify common types of bias found in scientific studies as well as identifying strategies used to mitigate such bias.

PHL 6510 **30 hours, 2 credits**
Research Methodology and Project Proposal
Prerequisite(s): PHL 6430
Corequisite(s): None
Prerequisite for: None

This lecture course casts the students in the role of lead investigator of their own line of clinical research. The course introduces students to the various aspects of scientific study design, from creating clearly defined research objectives, through clinical protocol development. Individual research projects are based on the identified knowledge gaps they found in the previous two courses. Statistical methodology and interpretation concepts are introduced, along with means for controlling bias, and ensuring overall scientific validity. The culminating research project design is demonstrated through an end of trimester poster session presenting each research proposal.

PHL 6520 **15 hours, 1 credit**
The Scientific Basis for Chiropractic Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course integrates and expands upon the knowledge and skills acquired in previous principles of healthcare practice courses. The scientific basis for a patient-centered and scientifically based chiropractic philosophy will be presented. Course material draws from current peer-reviewed literature in multiple scientific fields establishing the neurologic effects associated with joint dysfunction and for chiropractic care of the symptomatic and asymptomatic patient.

PHL 6610 **30 hours, 2 credits**
Ethics, Professionalism, and Jurisprudence
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will provide students with foundational knowledge for responsible professional behavior that will enable them to reflect upon and address ethical and sociocultural issues that they will confront as a future Doctor of Chiropractic while operating within the legal framework of the healthcare environment. Applied case situations will be analyzed and evaluated to determine appropriate patient management in accordance with ethical reasoning, professional ethics, cultural competence, jurisprudence, and inter-professional communication related to health care decision-making. Students will be offered options to explore special regulatory requirements of the U.S. vs. Canadian Healthcare Systems.

PHY 6110 **15 hours, 1 credit**
Cell Physiology
Prerequisite(s): None

Corequisite(s): None
Prerequisite for: PHY 6210

This course examines the physiologic functions of the cell including but not limited to cellular structure and function, reproduction (both mitosis and meiosis) and an introduction to endocrinology. Where appropriate, correlations with gross anatomy, histology, biochemistry, pathology, and chiropractic are included.

PHY 6210 45 hours, 3 credits
Foundations of Systems Physiology
Prerequisite(s): BCH 6110, PHY 6110
Corequisite(s): None
Prerequisite for: PHY 6310, PHY 6320

This is a course describing the functions and control of the physiology of the endocrine, reproduction, nervous, muscle and gastrointestinal systems.

PHY 6310 45 hours, 3 credits
Principles of Systems Physiology
Prerequisite(s): PHY 6210
Corequisite(s): None
Prerequisite for: None

This is a course describing the physiological functions, control, and interactions of the heart, the cardiovascular system, the renal system, and the respiratory system. Additionally, the impact of exercise on all systems of the body will be discussed.

PHY 6320 90 hours, 5 credits
Principles of Physiopathology
Prerequisite(s): PHY 6210
Corequisite(s): None
Prerequisite for: DIA 6420, PHY 6410

This course introduces students to pathology and the process of disease through the application of physiologic principles. Adaptive responses of cells and tissues, cell injury and death, neoplasia, abnormal immune responses, inflammation and repair, genetic disorders, and fluid and hematological disorders are explored using a problem-solving format.

PHY 6410 90 hours, 5 credits
Systems Pathology
Prerequisite(s): PHY 6320
Corequisite(s): None
Prerequisite for: DIA 6525, DIA 6635

In this course students will develop and reinforce comprehensive knowledge of disease processes and their causes and their clinical effects using a systems-based approach. Topics include the cardiac, pulmonary, gastrointestinal, muscular, endocrine, genitourinary and reproductive systems. Case-based approaches to structural abnormalities of cells and tissues at the gross and microscopic levels will be stressed.

RAD 6210 45 hours, 1.5 credits
Normal Imaging of the Spine and Extremities
Prerequisite(s): ANA 6145
Corequisite(s): ANA 6210
Prerequisite for: RAD 6310, RAD 6710

This course introduces the students to normal radiographic imaging of the spine and extremities. The course emphasizes the visualization of normal anatomical structures in standard diagnostic imaging procedures, common congenital anomalies, variants of normal, and mensuration procedures. Course content highlights the appropriate clinical indications and guidelines for diagnostic imaging of the spine and extremities.

RAD 6310 30 hours, 1 credit
Cross-Sectional Imaging Anatomy
Prerequisite(s): ANA 6145, ANA 6210, RAD 6210
Corequisite(s): ANA 6310
Prerequisite for: DIA 6420, RAD 6720

This course emphasizes normal cross-sectional anatomy as visualized on diagnostic imaging with a focus on computed tomography and magnetic resonance imaging of the head, neck, thorax, abdomen, spine, pelvis and extremities. Clinical correlation is made with concepts learned in previous coursework in normal radiographic anatomy, gross anatomy, and neuroanatomy. Students will learn to recognize and compare the appearance of normal structures from frequently encountered abnormalities.

RAD 6710 60 hours, 3 credits
Radiologic Science and Radiographic Examination
Prerequisite(s): RAD 6210
Corequisite(s): None
Prerequisite for: CLS 6850

This course addresses the principles of radiographic imaging and the biological effects. The course will emphasize the best available techniques for achieving desirable radiographs with minimal radiation to the

patient through radiological positioning procedures of the spine and extremities.

RAD 6720 30 hours, 1 credit
Ultrasonographic Imaging
Prerequisite(s): DIA 6420, RAD 6310
Corequisite(s): None
Prerequisite for: CLS 6850

This course focuses on clinical conditions optimally visualized and diagnosed using ultrasonography. The students will learn and apply basic acoustic principles of the musculoskeletal system as they explore common conditions, including tendon abnormalities, ligament tears, peripheral nerves, soft tissue mass, muscle contractions, tissue artifacts, foreign bodies, and inflammatory rheumatological disorders.

RAD 6810 30 hours, 2 credits
Clinical Imaging Evaluation
Prerequisite(s): DIA 6545, DIA 6635, DIA 6625
Corequisite(s): None
Prerequisite for: None

This course focuses on the diagnostic imaging interpretation of real and simulated case studies. Students will refine their knowledge and interpretation skills of diagnostic imaging studies, with an emphasis on decision-making appropriate to the roles of chiropractors. Students will be expected to order specific studies based on the clinical presentation, to perform the diagnostic interpretation of the studies, and to make appropriate recommendations based on the results of the studies.

TCH 6115 30 hours, 1 credit
Introduction to Palpation
Prerequisite(s): None
Corequisite(s): ANA 6145
Prerequisite for: TCH 6210

A laboratory course designed to introduce the student to the basics of palpation. The location and identification of the bony structures of the vertebral column, the shoulder girdle, the pelvis, and the superficial musculature of the back and neck are emphasized. The concepts oflayer palpation are introduced. The information received in this course will lay the foundation for all techniques the student of chiropractic will learn.

TCH 6120 30 hours, 1 credit
Psychomotor Skills
Prerequisite(s): None
Corequisite(s): ANA 6145
Prerequisite for: None

A course where students are introduced to the basics of psychomotor skills for chiropractic adjusting. Specific psychomotor techniques are presented and assessed with focus on the development of speed, dexterity, and understanding of the biomechanics related to both the doctor and patient. The information received in this course will lay the foundation for all future technique courses.

TCH 6210 75 hours, 3 credits
Introduction to Spinal Assessment and Manipulation
Prerequisite(s): TCH 6115
Corequisite(s): None
Prerequisite for: TCH 6310, TCH 6320, TCH 6410, TCH 6420, TCH 6511

This course integrates spinal biomechanics, assessment, and basic chiropractic adjusting skills. Emphasis is placed on static and motion palpation, developing tissue sense, enhancement of psychomotor skills, and basic spinal and pelvic adjustive techniques. The effects of a chiropractic adjustment, contraindications to spinal manipulation, and screening procedures are discussed. This course lays the foundation for future manipulation courses.

TCH 6310 60 hours, 2 credits
Spinal Assessment and Manipulation of the Pelvis and Lumbar Spine
Prerequisite(s): TCH 6210
Corequisite(s): None
Prerequisite for: None

In this course, students will learn the essential concepts and skills necessary to assess, palpate, and manipulate the lumbar spine and pelvis. Essential biomechanics and functional anatomy related to the lumbar spine and pelvis are emphasized. Patient assessment skills including history, range of motion, palpation, postural analysis, and soft tissue considerations are discussed. Continued emphasis is placed on tissue sense, psychomotor skills, and the doctor/patient interaction. Patient management strategies and treatment considerations are discussed. While focusing primarily on the lumbar spine and pelvis,

this course provides an opportunity for enhancement and review of previously learned spinal manipulative techniques.

TCH 6320 30 hours, 1 credit
Lower Extremity Assessment and Manipulation
Prerequisite(s): ANA 6210, TCH 6210
Corequisite(s): None
Prerequisite for: None

This course focuses on lower extremity biomechanics and common patient presentations related to injuries of the hip, knee, ankle, and foot. Patient management strategies are discussed with emphasis on mechanical diagnosis, including patient history, range of motion, osseous and soft tissue palpation, and postural and gait analysis. Treatment of these findings are introduced with emphasis on the instruction, delivery, and practice of lower extremity manipulations and mobilizations.

TCH 6330 30 hours, 2 credits
Foundations of Biomechanics
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: DIA 6415, DIA 6910, TCH 6611

This course will present the student with an overview of biomechanical forces, moments and biomechanical properties. Special emphasis will be placed on cartilage, bone, ligaments and muscle. Structure and function of the vertebral column will be reviewed and biomechanics of each region of spine, ribs and temporomandibular joint will be discussed. Lastly, the biomechanics of all the upper and lower extremity joints will be presented.

TCH 6410 60 hours, 2 credits
Spinal Assessment and Manipulation of the Thoracic Spine and Ribs
Prerequisite(s): TCH 6210
Corequisite(s): None
Prerequisite for: None

In this course, students will learn the essential concepts and skills necessary to assess, palpate, and manipulate the thoracic spine and ribs. Essential biomechanics and functional anatomy related to the thoracic spine and costal structures are emphasized. Patient assessment skills including history, range of motion, palpation, postural analysis, and soft tissue considerations are discussed. Continued emphasis is placed on tissue sense, psychomotor skills, and the doctor/patient interaction. Patient management strategies and treatment considerations are discussed. While focusing primarily on the thoracic spine and ribs, this course will provide an opportunity for enhancement and review of previously learned spinal manipulative techniques.

TCH 6420 30 hours, 1 credit
Upper Extremity Assessment and Manipulation
Prerequisite(s): ANA 6210, TCH 6210
Corequisite(s): None
Prerequisite for: None

This course focuses on upper extremity biomechanics and common patient presentations related to injuries of the shoulder, elbow, wrist, and hand. Patient management strategies are discussed with emphasis on mechanical diagnosis, including patient history, range of motion, osseous and soft tissue palpation, and postural analysis. Treatment of these findings are introduced with emphasis on the instruction, delivery, and practice of upper extremity manipulations and mobilizations.

TCH 6511 60 hours, 2 credits
Spinal Assessment & Manipulation of Cervical Spine
Prerequisite(s): TCH 6210
Corequisite(s): None
Prerequisite for: None

A laboratory course with continuing emphasis on chiropractic assessment and treatment skills. Focus is on the axial skeleton, particularly the cervical spine, with appendicular skeleton correlation. Essential biomechanics, functional anatomy and adjustive technique principles are reviewed. Emphasis continues on developing tissue sense, delivery skills, and basic and intermediate adjustive techniques; in addition, advanced adjustive techniques are introduced and practiced. Although the focus is particularly on the cervical spine, adjustive techniques for other spinal regions are reviewed with variations introduced to work toward mastery.

TCH 6515 30 hours, 1 credit
Myofascial Therapy I - Spine
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: TCH 6614

This course provides the students with a foundation for hands-on soft tissue assessment and treatment focused on the head, neck, and spine. Students will gain an

understanding of the muscular and myofascial system, and how soft tissue interventions can improve a person's function and well-being. Functional movement screens and assessments, postural analysis, and various manual therapy methods are presented. Instrument-assisted soft tissue mobilization is emphasized using the ConnecTX instrument and therapy system, myofascial release, trigger point therapy, and pin and stretch techniques are also highlighted. Rehabilitation strategies are discussed in relation to enhancing the effectiveness of the treatments provided.

TCH 6516 45 hours, 2 credits
Physical Rehabilitation of Spinal Disorders
Prerequisite(s): DIA 6415
Corequisite(s): DIA 6530, DIA 6545
Prerequisite for: TCH 6613, TCH 6710

This course focuses on principles of exercise and the use of exercise for the rehabilitation and treatment of spinal musculoskeletal conditions. Using an evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, taping protocols, and neural gliding techniques. The development of treatment plans, integration and progression of rehabilitation methods, proper patient education, self-management options and other home care strategies are highlighted.

TCH 6517 45 hours, 2 credits
Therapeutic Modalities
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides a practical approach of various therapeutic modalities commonly found in chiropractic practice that are used for pain control, reduction of inflammation, enhanced healing, muscle strains and spasms, and muscle strengthening. Lecture material will cover physiologic effects, indications, contraindications and proper techniques for using the covered modalities while laboratory time will provide the opportunity to practice the application of the modalities for a variety of conditions to different areas of the body.

TCH 6611 30 hours, 1 credit
Chiropractic Management of Disc Disorders
Prerequisite(s): DIA 6545, TCH 6330
Corequisite(s): None
Prerequisite for: None

This course covers the diagnosis, treatment, and management of spinal disc disorders. Strong emphasis will be placed on assessment and treatment utilizing flexion distraction decompression and end range loading techniques.

TCH 6613 45 hours, 2 credits
Physical Rehabilitation of Extremity Disorders
Prerequisite(s): TCH 6516
Corequisite(s): DIA 6625
Prerequisite for: TCH 6730

This course builds on the information covered in the spinal rehabilitation course by focusing on the use of exercise for the rehabilitation and treatment of musculoskeletal conditions of the extremities. Using an evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, taping protocols, and neural gliding techniques. Rehabilitation methods are integrated with patient education, self-management options and home care strategies.

TCH 6614 30 hours, 1 credit
Myofascial Therapy II - Extremities
Prerequisite(s): TCH 6515
Corequisite(s): None
Prerequisite for: None

Building upon previous myofascial coursework, this course emphasizes myofascial release, trigger point therapy, pin and stretch therapy, and instrument assisted soft tissue manipulation. The use and interpretation of functional movement assessments are discussed in correlation with common patient presentations of upper and lower extremity conditions. The ConnecTX instrument and therapy system will be emphasized. The integration of other therapeutic approaches, including rehabilitation strategies, are discussed in relation to enhancing the effectiveness of the treatments provided.

TCH 6710 30 hours, 1 credit
Integrative Strategies in Manual Therapy
Prerequisite(s): DIA 6545, TCH 6516
Corequisite(s): DIA 6710, DIA 6720
Prerequisite for: CLS 6850

This course introduces students to various patient populations and/or patients with specific needs that the Doctor of Chiropractic may encounter in practice. The

course will focus on modifications that should be made to the delivery of Diversified adjustments while also highlighting key features of other techniques commonly used in the treatment of these patients. The course will introduce students to chiropractic approaches to manage those conditions discussed in previous and concurrent coursework where chiropractic management or co-management of those conditions is warranted.

ELECTIVE COURSE DESCRIPTIONS

AST 6535 **30 hours, 2 credits**
Women's Health
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to provide students with in-depth knowledge regarding aspects of women's healthcare, covering anatomy, biology, and general health. The course will include training on conditions unique to women throughout the lifespan. While there will be a review of female anatomy, the course is predominately focused on medical science and applications specific to women's health. The course also covers topics including patient education, female sexuality, perimenopause, pregnancy, and infertility.

AST 6530 **30 hours, 2 credits**
Perinatal Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to provide the student with the knowledge required to assess and provide safe and appropriate chiropractic care to the pregnant and postpartum patient. Students will be taught to identify signs and symptoms suggesting pregnancy-specific conditions along with the appropriate procedures to follow-up with such conditions. Students will learn additional techniques and gain more experience treating the pregnant patient. Emphasis will be placed on biomechanical changes that occur throughout pregnancy, how these changes can manifest as physical complaints, common musculoskeletal complaints unique or common to the pregnant and postnatal patient, and the appropriate chiropractic care to address these complaints.

PHY 6515 **30 hours, 2 credits**
Exercise Physiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Exercise physiology pertains to the functioning of the human body during exercise. The purpose of this course is to increase the overall knowledge of the student about human physiology and the adaptations that occur during exercise. Emphasis is placed on bioenergetics as well as circulatory, respiratory, and neuromuscular responses to the physical stress of exercise. Also discussed are the effects of environmental factors and ergogenic aids on athletic performance. Understanding the interactions of metabolism, circulation, and structural adaptations in response to exercise and training are required to be an effective teaching or health care professional.

TCH 6735 **30 hours, 2 credits**
Caring for Athletes at Sporting Events
Prerequisite(s): AST 6625
Corequisite(s): None
Prerequisite for: None

This course is designed to familiarize the student with the assessment and management of common sports injuries encountered at sporting events. The practical aspects of the required equipment, care for the athlete, prevention, team dynamics, and reconditioning of athletic injuries will be stressed. The role of the athletic training profession in the sports medicine system will also be discussed.

DIA 6820 **30 hours, 2 credits**
Advanced Pediatric Care
Prerequisite(s): DIA 6708 (current curriculum) DIA 6710 (curriculum starting May 2024)
Corequisite(s): None
Prerequisite for: None

This course is designed to provide the student with advanced knowledge and experience required to assess and provide safe and appropriate chiropractic care to the pediatric patient. Students will be taught the necessary modifications to the chiropractic manipulative therapies when treating the pediatric patient and will be introduced to techniques commonly used in pediatric chiropractic practice. The course will also seek to educate the student on the neuromusculoskeletal complaints unique or common to the pediatric patient and the appropriate chiropractic care to address these complaints. Students will receive additional training in identifying pediatric-specific conditions and the

appropriate chiropractic or collaborative care needed to address these complaints.

TCH 6730 **30 hours, 2 credits**
Active Rehabilitation of Sports Injuries
Prerequisite(s): TCH 6613
Corequisite(s): None
Prerequisite for: None

Using an evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, end-range loading, and neural gliding techniques. Emphasis will be placed on common injuries sustained during the training or athletic competitions of various sports. The students will be familiarized with integrating rehabilitation methods, patient education, self-management options and other home care strategies.

SAMPLE SCHEDULE – STUDENTS ENROLLED STARTING IN MAY 2024
DOCTOR OF CHIROPRACTIC CURRICULUM

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
First Trimester					
ANA 6115	Histology	2	2	60	3
ANA 6120	Embryology	1	0	15	1
ANA 6130	Arthrology and Osteology of the Axial Skeleton	0	2	30	1
ANA 6140	Gross Anatomy of the Back and Thorax	2	2	60	3
ANA 6150	Functional Neuroanatomy	4	2	90	5
BCH 6110	Principles of Biochemistry	3	0	45	3
HCA 6110	Introduction to Patient Care	0	1	15	0.5
PHL 6120	Sociocultural and Interprofessional Development	2	0	30	2
PHL 6130	Foundations and History of Chiropractic	1	0	15	1
PHY 6110	Cell Physiology	1	0	15	1
TCH 6110	Introduction to Psychomotor and Palpation	0	3	45	1.5
TOTAL		16	12	420	22
Second Trimester					
ANA 6210	Gross Anatomy of the Extremities	3	4	105	5
ANA 6220	Clinical Neuroanatomy	4	2	90	5
BCH 6210	Nutrition and Metabolism	3	0	45	3
HCA 6210	Introduction to Integrative Healthcare	0	1	15	0.5
PHL 6210	Research Inquiry	1	0	15	1
PHY 6210	Foundations of Systems Physiology	3	0	45	3
RAD 6210	Normal Imaging of the Spine and Extremities	0	3	45	1.5
TCH 6210	Introduction to Spinal Assessment and Manipulation	1	4	75	3
TOTAL		15	14	435	22
Third Trimester					
ANA 6310	Gross Anatomy – Abdominopelvic Viscera / Head & Neck	3	4	105	5
HCA 6310	Essentials of Patient Documentation	0	1	15	0.5
MPH 6310	Clinical Microbiology	4	0	60	4
PHY 6310	Principles of Systems Physiology	3	0	45	3
PHY 6320	Principles of Physiopathology	4	2	90	5
RAD 6310	Cross-Sectional Imaging Anatomy	0	2	30	1
TCH 6310	Spinal Assessment and Manipulation of the Pelvis and Lumbar Spine	0	4	60	2
TCH 6320	Lower Extremity Assessment and Manipulation	0	2	30	1
TCH 6330	Foundations of Biomechanics	2	0	30	2
TOTAL		16	15	465	23.5

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
Fourth Trimester					
CHS 6410	Integration of Foundational Sciences	1	0	15	1
DIA 6415	Orthopedic and Neurological Assessment	2	4	90	4
DIA 6420	Musculoskeletal Pathology with Correlative Imaging	3	2	75	4
HCA 6410	Clinical Applications I – Patient History and Motivational Interviewing	0.5	1	22.5	1
MPH 6410	Public Health	2	0	30	2
PHL 6420	Principles of Chiropractic	2	0	30	2
PHL 6430	Literature Review	1	0	15	1
PHY 6410	Systems Pathology	4	2	90	5
TCH 6410	Spinal Assessment and Manipulation of the Thoracic Spine and Ribs	0	4	60	2
TCH 6420	Upper Extremity Assessment and Manipulation	0	2	30	1
TOTAL		15.5	15	457.5	23
Fifth Trimester					
DIA 6520	Rheumatology	2	2	60	3
DIA 6525	Clinical Laboratory Diagnosis	2	2	60	3
DIA 6530	Clinical Neurology	2	0	30	2
DIA 6545	Diagnosis and Management of Spinal Disorders	4	2	90	5
HCA 6510	Clinical Applications II – Examination of Spinal Conditions	0	1	15	0.5
PHL 6510	Research Methodology and Project Proposal	2	0	30	2
PHL 6520	The Scientific Basis for Chiropractic Care	1	0	15	1
TCH 6511	Spinal Assessment and Manipulation: Cervical Spine and Chiropractic Technique Capstone	0	4	30	2
TCH 6515	Myofascial Therapy I – Spine	0	2	30	1
TCH 6516	Physical Rehabilitation of Spinal Disorders	1	2	45	2
TCH 6517	Therapeutic Modalities	1	2	45	2
TOTAL		15	17	450	23.5

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
Sixth Trimester					
AST 6615	Clinical and Developmental Nutrition	3	0	45	3
AST 6625	Emergency Procedures	0.2	0.6	15	0.5
DIA 6635	General Diagnosis	4	4	120	6
DIA 6625	Diagnosis and Management of Extremity Disorders	4	2	90	5
DIA 6630	Clinical Decision Making in Spinal Disorders	0	4	60	2
HCA 6610	Clinical Applications III – Comprehensive Physical Examinations	0	1	15	0.5
PHL 6610	Ethics, Professionalism, and Jurisprudence	2	0	30	2
TCH 6611	Chiropractic Management of Disc Disorders	0	2	30	1
TCH 6613	Physical Rehabilitation of Extremity Disorders	1	2	45	2
TCH 6614	Myofascial Therapy II – Extremities	0	2	30	1
TOTAL		14.2	17.6	480	23
Seventh Trimester					
AST 6720	Clinical Psychology	2	0	30	2
AST 6730	Clinical Pharmacology	3	0	45	3
AST 6740	Health Promotion and Wellness	2	0	30	2
BPM 6715	Introduction to Coding and Billing	1	0	15	1
BPM 6720	Roadmap to Practice	1	0	15	1
CLS 6750	Pre-Clerkship	1	4	75	3
DIA 6710	Maternity and Pediatric Evaluation and Management	3	0	45	3
DIA 6715	Clinical Decision-Making Capstone	0	4	60	2
DIA 6720	Geriatric Evaluation and Management	1	0	15	1
RAD 6710	Radiologic Science and Radiographic Examination	2	2	60	3
RAD 6720	Ultrasonographic Imaging	0	2	30	1
TCH 6710	Integrative Strategies in Manual Therapy	0	2	30	1
TOTAL		16	14	450	23

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
Eighth Trimester					
AST 6815	Biopsychosocially Oriented Clinical Practice	2	0	30	2
AST 6825	Team-Based and Collaborative Care	1	0	15	1
BPM 6815	Strategic Applications in Business and Practice Management	3	0	45	3
CLS 6850	Clinical Clerkship – Community Clinic and Rotations I	0	20	300	10
CLS 6860	Grand Rounds and Case Reviews	1	0	15	1
DIA 6810	Clinical Laboratory Evaluation	1	0	15	1
HCA 6810	Patient Education	1	0	15	1
RAD 6810	Clinical Imaging Evaluation	2	0	30	2
TOTAL		11	20	465	21
Ninth Trimester					
AST 6910	Diversity and Transcultural Competence	1	0	15	1
BPM 6910	Marketing and Public Relations Strategies	2	0	30	2
BPM 6915	Financing and Budgeting in Healthcare Administration	2	0	30	2
CHS 6910	Clinical Competency Capstone	0	2	30	1
CLS 6950	Clinical Clerkship – Community Clinic and Rotations II	0	20	300	10
CLS 6960	Grand Rounds – Advanced and Complex Cases	1	0	15	1
DIA 6910	Ergonomics and Occupational Health	2	0	30	2
TOTAL		8	22	450	19
Tenth Trimester					
BPM 7110	Office Operations and Procedures	2	0	30	2
BPM 7115	Advanced Billing and Coding	2	0	30	2
CLS 7150	Clinical Clerkship – Distinction Program	0	20	300	10
DIA 7110	Post-Surgical Care	2	0	30	2
DIA 7115	Special Examinations	1	0	15	1
TOTAL		7	20	405	17
TOTAL CORE HOURS		135.5	165	4,507.5	218
*TOTAL ELECTIVE COURSE HOURS (A minimum of 6 elective credit hours must be completed after completion of 4th trimester coursework)		6		90	6
TOTAL PROGRAM HOURS		141.5	165	4,597.5	224

ANA 6115 **60 hours, 3 credits**
Histology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will introduce students to the microscopic organization and structure of human tissues and cell biology. The normal histology of epithelia, connective tissue, cartilage and bone, blood, muscle, nervous system, circulatory system, lymphatic system, endocrine system, digestive system, integument system, respiratory system, urinary system, and reproductive system will be discussed.

ANA 6120 **15 hours, 1 credit**
Embryology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

In this course, students will progressively be introduced to the developmental events that occur during embryogenesis, starting with gametogenesis, fertilization, and early embryo development, followed by the events during weeks 3 to 8 (embryonic period) and the development of the gut tube and body cavities, ending with the third month through birth and the placenta. Lastly, a systems-based discussion of all major systems, including special sense organs will be presented.

ANA 6130 **30 hours, 1 credit**
Arthrology and Osteology of the Axial Skeleton
Prerequisite(s): None
Corequisite(s): TCH 6110
Prerequisite for: None

This hands-on experience will engage students to learn the osteology and associated landmarks of the axial skeleton. They will also learn the arthrology associated with all the joints in the axial skeleton. Additionally, the pectoral and pelvic girdle will also be presented.

ANA 6140 **60 hours, 3 credits**
Gross Anatomy of the Back and Thorax
Prerequisite(s): None
Corequisite(s): TCH 6110
Prerequisite for: ANA 6210, ANA 6310, RAD 6210, RAD 6310

This course will present all the anatomy of the back and thorax, including organs, in a cadaveric dissection course. Topographical anatomy, dermatomes, lymphatics, and blood supply will also be covered.

ANA 6150 **90 hours, 5 credits**
Functional Neuroanatomy
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: ANA 6220

A multidisciplinary approach to neuroscience that integrates relevant topics in anatomy and physiology. Lectures will be supplemented by laboratory exercises in neuroanatomy and neurology, with an emphasis on clinical correlation and an introduction to the use of case studies. External anatomy and function of the spinal cord, brainstem, cerebellum, diencephalon and cerebrum will be explored. The neuroanatomical and neurophysiological basis of chiropractic practice will also be discussed.

ANA 6210 **105 hours, 5 credits**
Gross Anatomy of the Extremities
Prerequisite(s): ANA 6140
Corequisite(s): RAD 6210
Prerequisite for: RAD 6310, TCH 6320, TCH 6420

This course will present all the anatomy associated with the upper and lower extremities in a lecture and cadaveric dissection laboratory format. Topographical anatomy, dermatomes, lymphatics and blood supply will also be covered.

ANA 6220 **90 hours, 5 credits**
Clinical Neuroanatomy
Prerequisite(s): ANA 6150
Corequisite(s): None
Prerequisite for: ANA 6310, DIA 6530

A multidisciplinary approach, integrating relevant topics in Neuroanatomy and Neurophysiology with more extensive coverage of neurological diagnosis. Lectures will be supplemented by lab exercises in Neuroanatomy, again with an emphasis on clinical correlation and cross sections and imaging. Numerous case studies will be examined in both lecture and laboratory. The Neuroanatomical and Neurophysiological basis of chiropractic practice will also be explored.

ANA 6310 **105 hours, 5 credits**
Gross Anatomy – Abdominopelvic Viscera / Head & Neck
Prerequisite(s): ANA 6140, ANA 6220
Corequisite(s): RAD 6310
Prerequisite for: CHS 6410, DIA 6415

This course will present the student with all the anatomy of the abdominal wall, pelvis, perineum and organs contained therein. Head and neck anatomy will also be presented. Topographical anatomy, dermatomes, lymphatics and blood supply will be covered.

AST 6615 **45 hours, 3 credits**
Clinical and Developmental Nutrition
Prerequisite(s): BCH 6210
Corequisite(s): None
Prerequisite for: None

A course that develops foundational knowledge in clinical and developmental nutrition and the impact nutrition has on improving human health. Evidenced-based nutrition assessment, proper food selection and supplemental recommendations are emphasized to enable a chiropractor to develop an individualized therapeutic program to address age related or chronic diseases. Evidence-based nutritional support for the general health of the patient on medication will be presented with emphasis on the importance of drug interactions.

AST 6625 **15 hours, 0.5 credits**
Emergency Procedures
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to prepare students to recognize and provide an effective response to the most common medical emergencies in the workplace and the community. Effective communication relating to coordination of an emergency response and knowledge and proficiency in CPR/ AED and first aid will be emphasized. Students will learn to perform the necessary interventions in situations of cardiopulmonary arrest, poisoning, thermal injuries, shock, head and spinal injuries, choking and airway obstruction, as well as the emergency management of common athletic injuries such as fractures, dislocations, strains and sprains.

AST 6720
Clinical Psychology **30 hours, 2 credits**
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on a biological and psychosocial perspective on human behavior and its application in clinical practice. General concepts, psychological assessment, mental/emotional disorders, including standardized diagnostic screening tools and criteria and behavioral management strategies are covered.

AST 6730 **45 hours, 3 credits**
Clinical Pharmacology
Prerequisite(s): BCH 6210
Corequisite(s): None
Prerequisite for: None

This course provides students with an overview of pharmacology and toxicology with an emphasis on clinical applications within the context of chiropractors. The course helps with the prioritization of patients' needs under the biopsychosocial framework. The course is designed to familiarize the student with the most used pharmaceuticals, their actions, indications, contraindications, and side effects for the management of the most prevalent chronic conditions through evidence-based learning.

AST 6740 **30 hours, 2 credits**
Health Promotion and Wellness
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides an overview of strategies employed by healthcare providers to help reduce the risk of chronic diseases and disabilities. Current health information education and screening tools are discussed. The role and effectiveness of behavioral interventions and lifestyle modifications to improve the health and wellness of a person (patient) and the health of the community are also presented. Utilizing government sources and other evidence-based literature, students will learn trends in vulnerable populations and patient-centered collaborative approaches best suited to address these gaps in healthcare outcomes.

AST 6815 **30 hours, 2 credits**
Biopsychosocially Oriented Clinical Practice
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course that presents an overview of the biopsychosocial (BPS) model in management of musculoskeletal conditions in a chiropractic practice with an emphasis on spine related disorders. The BPS approach to clinical management addresses not only the biological source of a spine related disorder, but also the psychological (thoughts, emotions, behaviors), and social (socio-economic, socio-environmental, cultural) factors that may influence or perpetuate a pain condition. This supports a community wide approach to patient empowered healthcare through the first messages received, whether as an independent practitioner, or in an interprofessional collaborative setting.

AST 6825 **15 hours, 1 credit**
Team-Based and Collaborative Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course prepares the future Doctor of Chiropractic to work collaboratively within a team environment to integrate clinical care and optimize patient outcomes. Recognition of the cultures, roles, expertise, and values of other health professions, as well as patients is stressed. Students will develop the skills necessary to engage and develop interprofessional relationships, to understand team dynamics, and to communicate effectively as part of a team approach to patient-centered care.

AST 6910 **15 hours, 1 credit**
Diversity and Transcultural Competence
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is intended to help students analyze the strong link between health outcomes and issues of human diversity through the lens of race, immigration status, gender, ethnicity, ability, language, sexual orientation, socioeconomic status, community, health literacy and language barriers, access to resources and their collective impact on health behaviors. It refines student's understanding of the underline causes of health, wellness, and illness. It broadens the student's perspective regarding health inequality and access to services. It will allow to evaluate each determinant and the impact in population health. Students will use scientific literature of social sciences to identify and interpret how determinants inform practitioners in their understanding and treatment of diverse patient populations. Course discussions will bring awareness to each student's personal biases that may impact the delivery of care.

BCH 6110 **45 hours, 3 credits**
Principles of Biochemistry
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BCH 6210, PHY 6210

This course introduces the basic chemical components found in the diet and/or utilized by the body. The structure and major biochemical functions of carbohydrates, lipids, nucleic acids, proteins, hormones and vitamins are explored.

BCH 6210 **45 hours, 3 credits**
Nutrition and Metabolism
Prerequisite(s): BCH 6110
Corequisite(s): None
Prerequisite for: AST 6615, AST 6730

This is a course describing the major biochemical pathways of carbohydrates, lipids, nucleic acids and protein synthesis. The relationship of these mechanisms to nutrition, physiological processes and to the health of the human body is stressed. Nutritional deficiencies and the resulting clinical consequences are introduced.

BPM 6715 **15 hours, 1 credit**
Introduction to Coding and Billing
Prerequisite(s): HCA 6310
Corequisite(s): None
Prerequisite for: BPM 7115

This course provides students with an introduction to coding and billing requirements and strategies to successfully receive reimbursement for their professional services from third-party payers. Topics covered include how to accurately use diagnostic and procedure codes and how to efficiently document care in order to minimize legal liability and delays or denials of insurance claims.

BPM 6720 **15 hours, 1 credit**
Roadmap to Practice
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BPM 6815

This course details the logical steps necessary to transition from chiropractic student to solo practitioner, associate, independent contractor, or partner within a multidisciplinary healthcare setting. Students apply effective principles of goal setting and develop a sound foundation for assertive decision-making and fostering professional relationships. Application of coursework culminates with the generation of a professional practice portfolio specifying licensure, credentialing, involvement with state and provincial associations, and compliance requirements as a guiding collection of documents specific to the context of the future practitioner.

BPM 6815 **45 hours, 3 credits**
Strategic Applications in Business and Practice Management
Prerequisite(s): BPM 6720
Corequisite(s): None
Prerequisite for: BPM 7110

Chiropractors possess the option of practicing in several different scenarios from solo practice, associateship, specialty, or multi-disciplinary settings. This course employs practical applications of principles of entrepreneurship through self-selection from a variety of learning modules specific to the student's individual practice goals. Topics include examination of business entities and their structure, performing market needs analyses, requirements of managing the revenue cycle, compliance regulations, human resource management, contract negotiation, maintaining electronic health records, and general business processes inherent in chiropractic practice management. Through readings, lectures, discussions and case analysis, students will develop practical insights into the nature of chiropractic practice as well as anticipate potential problems and resolve conflicts while maintaining financial viability and growth.

BPM 6910 **30 hours, 2 credits**
Marketing and Public Relations Strategies
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course cultivates student's understanding of the value of an integrated publicity and promotions strategy to bring awareness to chiropractic's tangible benefits through the paradigms of public relations, marketing, advertising, and sale of services. Students will build and utilize a practical repertoire of communication techniques ranging from public speaking, traditional and digital advertising, and social media content creation, to execute effective message design and marketing strategies. Using specific case examples, students will implement within their business plan market and trend analysis vital to the successful growth of their practice.

BPM 6915 **30 hours, 2 credits**
Financing and Budgeting in Healthcare Administration
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides future practitioners a framework for addressing fiscal management of a chiropractic healthcare enterprise while striving to increase their understanding of the unique aspects of issues faced in healthcare finance. Students will employ a practical approach in identifying, analyzing, and making budgetary and financial recommendations to benefit the ongoing operations of a healthcare entity. Topics include securing and managing of funds, reimbursement systems, implementing tax-friendly decisions and documentation, preparation and processing of budgets, revenue projection, debt management and expenditure control, and risk management to make responsible managerial decisions.

BPM 7110 **30 hours, 2 credits**
Office Operations and Procedures
Prerequisite(s): BPM 6815
Corequisite(s): None
Prerequisite for: None

This course focuses on the essential business practices necessary to oversee the operations of a productive chiropractic practice. The coursework is divided into two domains; 1) Development and implementation of an office policy and procedures manual to define employee roles and tasks, facilitate the training of staff, clarify key responsibilities (e.g., HIPAA, emergency protocols, patient scheduling, office maintenance, and inventory management) and 2) Development of a clinic health evaluation system to collect and analyze key business

performance indicators to improve patient outcomes and business success.

BPM 7115 30 hours, 2 credits
Advanced Billing and Coding
Prerequisite(s): BPM 6715
Corequisite(s): None
Prerequisite for: None

This course provides students with an in-depth understanding of the American Health Care System and strategies to successfully receive reimbursement for their professional services from third-party payers. Topics covered include how to analyze the reimbursement environment before beginning a practice in a particular geographic area; how to accurately use diagnostic and procedure codes; how to efficiently document care in order to minimize legal liability and delays or denials of insurance claims; and how to create a rational fee schedule for a chiropractic practice. Students will gain first-hand experience in billing and coding that they will be able to apply immediately when they begin their chiropractic practices.

CHS 6410 15 hours, 1 credit
Integration of Foundational Sciences
Prerequisite(s): ANA 6310, MPH 6310, PHY 6310, PHY 6320
Corequisite(s): None
Prerequisite for: None

This course facilitates the integration of key concepts learned in the foundational sciences to prepare students to apply the knowledge in the clinical sciences portion of the curriculum. The course prepares students to connect and relate the information learned across six primary domains: general anatomy, spinal anatomy, physiology, chemistry, pathology, and biochemistry. Through the integration of these domains, students will gain an appreciation of the multi-dimensional and inter-related human systems that may influence the health of their future patients.

CHS 6910 30 hours, 1 credit
Clinical Competency Capstone
Prerequisite(s): CLS 6850
Corequisite(s): None
Prerequisite for: None

A course performed in a clinical setting focused on the refinement and demonstration of clinical skills at a level that meets or exceeds the program intended clinical competencies. Through active participation in patient care and various assessment methods, including practical examinations, students will demonstrate their knowledge, skills, and attitudes in alignment with the Program Learning Outcomes.

CLS 6750 75 hours, 3 credits
Pre-Clerkship
Prerequisite(s): DIA 6635, HCA 6610
Corequisite(s): DIA 6715
Prerequisite for: CLS 6850, CLS 6860, HCA 6810

This course is designed to integrate all the principles and practical application of patient care developed in prior courses with refinement of documentation procedures in a campus clinical environment. Students will also have the opportunity to choose their area of focus for their clinical distinction experience.

CLS 6850 300 hours, 10 credits
Clinical Clerkship – Community Clinic and Rotations I
Prerequisite(s): CLS 6750, DIA 6715, RAD 6710, RAD 6720, TCH 6710
Corequisite(s): None
Prerequisite for: CHS 6910, CLS 6950

The first clerkship course is a comprehensive practical experience where students are immersed in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

CLS 6860 15 hours, 1 credit
Grand Rounds and Case Reviews
Prerequisite(s): CLS 6750
Corequisite(s): None
Prerequisite for: CLS 6960

A course designed to challenge students in the interpretation of patient history findings, diagnostic tests, clinical reasoning, and the development of treatment plans using case-based learning exercises and patient case studies.

CLS 6950 **300 hours, 10 credits**
Clinical Clerkship – Community Clinic and Rotations II
Prerequisite(s): CLS 6850
Corequisite(s): None
Prerequisite for: CLS 7150

The second clerkship course builds on the skills developed in prior clinical experiences. The students continue their comprehensive immersion in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

CLS 6960 **15 hours, 1 credit**
Grand Rounds – Advanced and Complex Cases
Prerequisite(s): CLS 6860
Corequisite(s): None
Prerequisite for: None

In this clinical course, students will be exposed to higher levels of complex cases and will participate in the interpretation of patient history findings, diagnostic tests, clinical reasoning, and the development of treatment plans using case-based learning exercises and patient case studies. Students will also be expected to collect and support each case with evidence-based practices.

CLS 7150 **300 hours, 10 credits**
Clinical Clerkship – Distinction Programs
Prerequisite(s): CLS 6950
Corequisite(s): None
Prerequisite for: None

The third clerkship course builds on the skills developed in prior clinical experiences. The students continue their comprehensive immersion in a clinical environment with the responsibility to provide patient care under the guidance and supervision of licensed clinicians in accordance with health center policies. Opportunities for participation in clinical rotations or selected remote clerkships are provided based on availability.

DIA 6415 **90 hours, 4 credits**
Orthopedic and Neurological Assessment
Prerequisite(s): ANA 6310, HCA 6310, TCH 6330
Corequisite(s): HCA 6410
Prerequisite for: DIA 6530, DIA 6545, DIA 6625, HCA 6510, HCA 6610, TCH 6516

This course introduces students to the physical orthopedic and neurological assessment techniques of the brain, spine, and extremities. The students will learn to perform evidence-based physical examinations, to recognize positive signs and symptoms, and to critically analyze the examination findings to inform the diagnosis, treatment plan, and prognosis of orthopedic and neurological conditions commonly encountered in a chiropractic practice.

DIA 6420 **75 hours, 4 credits**
Musculoskeletal Pathology with Correlative Imaging
Prerequisite(s): PHY 6320, RAD 6310
Corequisite(s): None
Prerequisite for: DIA 6520, DIA 6525, DIA 6545, RAD 6720

This course focuses on the study of abnormal pathophysiological manifestations of conditions encountered in a chiropractic practice. Correlation between the pathogenesis, cellular events of disease progression, and the macroscopic and clinical manifestations of diseases is emphasized. Students are introduced to categories of musculoskeletal conditions, such as congenital and inherited dysplasias, infections, arthritides, hematological and blood disorders, nutritional, endocrine, and metabolic conditions, and neoplastic and tumor-like disorders. The descriptive terminology and characteristic appearances of the pathologies is emphasized primarily through the use of diagnostic imaging studies.

DIA 6520 **60 hours, 3 credits**
Rheumatology
Prerequisite(s): DIA 6420
Corequisite(s): DIA 6525
Prerequisite for: DIA 6625

This course is designed to expand the practical knowledge of students with the diagnosis and management of rheumatological disorders. Students will learn to recognize and differentiate patterns of disease, levels of progression, correlate laboratory, and imaging examinations findings, consider extra-skeletal

manifestations, and will discuss preferred management options, including advanced testing, specialty referrals, and indications and contraindications for chiropractic manipulations.

DIA 6525 60 hours, 3 credits
Clinical Laboratory Diagnosis
Prerequisite(s): DIA 6420, PHY 6410
Corequisite(s): DIA 6520, DIA 6545
Prerequisite for: DIA 6635, DIA 6810

This course focuses on the pathophysiologic basis and clinical interpretation of diagnostic laboratory tests. Emphasis is placed upon the clinical presentation and relevant laboratory findings in order to establish a differential or definitive diagnosis. Routine lab testing – including urinalysis, CBC, blood chemistries, serology, and immunology – will be presented. Advanced and specialized laboratory procedures are also introduced. Techniques and procedures for venipuncture / phlebotomy are presented and performed in the laboratory portion.

DIA 6530 30 hours, 2 credits
Clinical Neurology
Prerequisite(s): ANA 6220, DIA 6415
Corequisite(s): DIA 6545, TCH 6516
Prerequisite for: None

This course covers common neurologic symptoms and disorders with special focus on conditions likely to be seen in a chiropractic office. Emphasis will be placed on developing a practical, systematic approach to the recognition, evaluation and differential diagnosis of common neurologic signs, symptoms, and disorders.

DIA 6545 90 hours, 5 credits
Diagnosis and Management of Spinal Disorders
Prerequisite(s): DIA 6415, DIA 6420, HCA 6410
Corequisite(s): DIA 6525, DIA 6530, TCH 6516
Prerequisite for: DIA 6630, DIA 6810, HCA 6610, RAD 6810, TCH 6611, TCH 6710

This course focuses on the development of clinical skills related to the diagnosis and management of spinal conditions commonly presenting in a chiropractic office. For each condition, students will explore the findings of patient history, physical examination, diagnostic imaging, clinical laboratory, and other ancillary testing to establish a diagnosis and/or differential. This will include the identification and recognition of signs and symptoms that warrant additional examinations or referrals to other providers. Evidence-informed patient management plans are discussed for each condition.

DIA 6635 120 hours, 6 credits
General Diagnosis
Prerequisite(s): DIA 6525, HCA 6410, PHY 6410
Corequisite(s): HCA 6610
Prerequisite for: CLS 6750, DIA 6710, DIA 6720, DIA 6810, RAD 6810

This course focuses on the diagnosis and management of non-neuromusculoskeletal conditions which may present to the chiropractor's office for an initial diagnosis. Emphasis is placed on the development and practical application of history taking, selecting appropriate diagnostic examination procedures, formulating a differential diagnosis, and interpreting examination data to formulate a final diagnosis. Appropriate treatment and co-management plans will be emphasized. The laboratory segment of the course will focus on the physical examination skills of the integumentary, respiratory, cardiovascular, gastrointestinal, genitourinary, and endocrine systems, in addition to a survey of common diagnostic imaging findings of diseases of the thorax, abdomen and pelvis.

DIA 6625 90 hours, 5 credits
Diagnosis and Management of Extremity Disorders
Prerequisite(s): DIA 6415, DIA 6520
Corequisite(s): TCH 6613
Prerequisite for: DIA 6810, RAD 6810

This course is focused on the development of clinical skills related to the diagnosis and management of extremity conditions commonly presenting in a chiropractic office. For each condition, students will explore the findings of patient history, physical examination, diagnostic imaging, clinical laboratory, and other ancillary testing to establish a diagnosis and/or differential. This will include the identification and recognition of signs and symptoms that warrant additional examinations or referrals to other providers. Evidence-informed patient management plans are discussed for each condition.

DIA 6630 60 hours, 2 credits
Clinical Decision Making in Spinal Disorders
Prerequisite(s): DIA 6545
Corequisite(s): None
Prerequisite for: DIA 6715

This course will develop the skills of the student clinician in the application of problem-focused history taking, physical examination procedures, ordering and interpretation of appropriate testing such as diagnostic imaging and clinical laboratory. Students will be exposed to real-life cases and case simulations focused on spinal conditions. The information collected and analyzed during the patient examination will result in the development of a reasonable differential diagnosis and working diagnosis. An evidence-informed conservative management plan will be developed related to each clinical scenario.

DIA 6710 45 hours, 3 credits
Maternity and Pediatric Evaluation and Management
Prerequisite(s): DIA 6635
Corequisite(s): DIA 6720, TCH 6710
Prerequisite for: DIA 6820

This course focuses on the diagnosis and management of conditions commonly encountered in the chiropractic practice affecting the pediatric population and pregnant and postpartum mothers. Normal physiological development and changes during these stages of life are discussed with an emphasis on recognizing those disorders necessitating referral or co-management and where chiropractic care of the individual is applicable. The importance of interprofessional collaboration in the care of pediatric and pregnant patients will be addressed.

A two-hour online course on mandated child abuse reporter training is included with mandatory completion needed for graduation and licensure in New York State.

DIA 6715 60 hours, 2 credits
Clinical Decision-Making Capstone
Prerequisite(s): DIA 6630
Corequisite(s): CLS 6750
Prerequisite for: CLS 6850

This course provides an opportunity for students to refine and demonstrate their clinical reasoning skills regarding the application of problem-focused history taking, physical examination procedures, ordering and interpretation of appropriate testing such as diagnostic imaging and clinical laboratory. Students are exposed to real-life cases and case simulations focused on systemic or neuromusculoskeletal conditions. The information collected and analyzed during the patient examination will result in the development of a reasonable differential diagnosis and working diagnosis. Students will demonstrate the ability to develop and present an evidence-informed conservative management plan for each clinical scenario explored in the course.

DIA 6720 15 hours, 1 credit
Geriatric Evaluation and Management
Prerequisite(s): DIA 6635
Corequisite(s): DIA 6710, TCH 6710
Prerequisite for: None

This course is designed to train students in the foundations of geriatric patient care. The course presents the unique health care needs of older adults, discusses the clinical presentation and diagnosis of common conditions affecting elderly patients with emphasis on recognizing those disorders necessitating referral or co-management. Where chiropractic care of the individual is applicable, modifications to the delivery of the adjustment will be discussed.

DIA 6810 15 hours, 1 credit
Clinical Laboratory Evaluation
Prerequisite(s): DIA 6525, DIA 6545, DIA 6635, DIA 6625
Corequisite(s): None
Prerequisite for: None

This course focuses on the interpretation of diagnostic laboratory examinations of real and simulated case studies. Students will refine their knowledge of laboratory studies and clinical decision-making appropriate to the roles of chiropractors as they order exams and analyze the results of routine lab testing including urinalysis, CBC, blood chemistries, serology, and immunology, as well as advanced or specialized studies. Special emphasis is placed on health screenings, early diagnosis, and the importance of interprofessional collaboration in the management of patient conditions that fall outside the traditional scope of practice of chiropractors.

DIA 6910 **30 hours, 2 credits**
Ergonomics and Occupational Health
Prerequisite(s): TCH 6330
Corequisite(s): None
Prerequisite for: None

In this course, students will learn to evaluate a physical work environment and provide recommendations on modifications of that environment to prevent repetitive injuries and promote healthy behaviors. Course discussions will include work safety and/or prevention programs. Classes will include lectures and practical exercises, with emphasis on integrating previously accumulated knowledge and skills with those developed in the course.

DIA 7110 **30 hours, 2 credits**
Post-Surgical Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on the clinical evaluation and management of post-surgical patients. Students will discuss common surgical interventions of the spine and extremities that may be observed in a chiropractic practice and will explore how these surgical procedures may modify treatment plans. An emphasis is placed on pre-surgical candidate selection and preparation, collaborative care, disability prevention, self-care strategies and non-pharmacological management of musculoskeletal and/or neurologically mediated pain.

DIA 7115 **15 hours, 1 credit**
Special Examinations
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on the role of advanced diagnostic procedures and special examinations commonly encountered in a chiropractic practice. Students will explore the clinical indications, contraindications, and other requirements related to special examinations. Discussions will include electromyography and nerve conduction studies, impairment ratings, department of transportation examinations, and other specialized or advanced examinations.

HCA 6110 **15 hours, .5 credit**
Introduction to Patient Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to review the role of chiropractors as essential providers within the US and Canadian Healthcare systems, the expectations of professionalism in patient care settings, patient privacy training and to introduce students to various professional chiropractic organizations. There will be opportunities for students to shadow in a chiropractic office, to receive chiropractic care, and to participate as a simulated patient for upper-level students.

HCA 6210 **15 hours, .5 credit**
Introduction to Integrative Healthcare
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to introduce students to different medical specialties and integrative environments to include office and hospital procedures. There will be opportunities for students to shadow other healthcare disciplines or integrated settings. Students will continue to participate as simulated patients for upper-level students.

HCA 6310 **15 hours, .5 credit**
Essentials of Patient Documentation
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BPM 6715, DIA 6415, HCA 6410

A course where students will be introduced to the basics of all patient files, best practices of documentation in electronic health records utilized in the Northeast College health centers. Students will continue to gain clinical experience by shadowing chiropractic providers and participating as simulated patients for upper-level students.

HCA 6410 **22.5 hours, 1 credit**
Clinical Applications I – Patient History and Motivational Interviewing
Prerequisite(s): HCA 6310
Corequisite(s): DIA 6415
Prerequisite for: DIA 6545, DIA 6635, HCA 6510

This course introduces students to the techniques required to perform a complete and systematic case history to help inform the patient examination and identify the need for referrals to other providers. As a first line communication with the patient, students will learn ethical patient-centered practices of motivational interviewing to build rapport, engage patients in their care, and maximize patient outcomes. The course also introduces the concepts of professional behaviors, liability and risk-management strategies, and the importance of sociocultural factors in the patient interview.

HCA 6510 **15 hours, .5 credit**
Clinical Applications II – Examination of Spinal Conditions
Prerequisite(s): DIA 6415, HCA 6410
Corequisite(s): None
Prerequisite for: HCA 6610

This course is designed for students to apply health center examination and documentation procedures with a focus on spine care. Students will apply clinical skills learned in multiple courses to the clinical environment, including orthopedic, neurological, and chiropractic examinations and the development of case management plans. Special consideration of co-management of cases with other providers will be introduced.

HCA 6610 **15 hours, .5 credit**
Clinical Applications III – Comprehensive Physical Examinations
Prerequisite(s): DIA 6415, DIA 6545, HCA 6510
Corequisite(s): DIA 6635
Prerequisite for: CLS 6750

This course is designed for students to apply health center procedures with a focus on the physical assessment, documentation, diagnosis, and early development of a management plan in a simulated clinical environment. Students will apply the clinical skills learned in multiple courses, including general physical examinations, specific orthopedic, neurological and vascular examinations of the spine and extremities and the development of case management plans. Special considerations for active care and rehabilitation will be emphasized in the clinical environment.

HCA 6810 **15 hours, 1 credit**
Patient Education
Prerequisite(s): CLS 6750
Corequisite(s): None
Prerequisite for: None

This course is designed to foster practical application of patient education procedures in a health center environment as a key component of patient-centered care. The students will be engaged in evidence-based practices of patient education for the self-management of acute and chronic neuromusculoskeletal pain, osteoarthritis-related disorders, inflammatory conditions, injury and fall prevention, disability prevention, mental health screening, and to motivate patients towards adopting general lifestyle behavioral changes. Counseling of patients related to fear-avoidance beliefs and other components of the biopsychosocial model of care will be emphasized.

MPH 6310 **60 hours, 4 credits**
Clinical Microbiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: CHS 6410

This course focuses on the structure, biochemistry, and genetics of organisms associated with human infectious disease. The immune system will be introduced. Cells of the immune system, antigens, antibodies and complements will be discussed. Hypersensitivity and immunopathologies will be covered along with immunizations and vaccinations. Modes of transmission, epidemiology, mechanisms of specific and nonspecific host resistance, methods of disinfection and prevention are emphasized.

MPH 6410 **30 hours, 2 credits**
Public Health
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course examines the concepts, methods, and practices for assessing the health of a community. Topics include measuring population health status, the historical impact of public health interventions, potential barriers to improving health, developing community health profiles, identifying the social determinants of

health, and the utilization of community health assessment in developing public health interventions. There will be discussions on government agencies involved in overseeing public health. Emphasis will be on how the chiropractor can relate to these topics and be a public health change agent in their community.

PHL 6120 30 hours, 2 credits
Sociocultural and Interprofessional Development
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course introduces new Doctor of Chiropractic students to foundational principles of healthcare and strategies for successful matriculation within the professional graduate degree program. The course is separated in three distinct sections: a) seminar in professional development, providing an overview of the program resources, academic expectations, and professional responsibilities; b) the role of chiropractic within the healthcare system, including an introduction to skills and competencies required for effective interprofessional collaboration; c) reflections on the role of sociocultural, socioeconomic, and diversity factors in contemporary society to meet the healthcare needs of various groups and populations.

PHL 6130 15 hours, 1 credit
Foundations and History of Chiropractic
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A course in which the history of chiropractic is traced from its origins to the present day. The basic concepts of chiropractic philosophy as they were originally formulated and as they have evolved to present-day scientific thinking are discussed at length.

PHL 6210 15 hours, 1 credit
Research Inquiry
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHL 6430

This course introduces students to the concepts and structure of developing a clinical research question. Students will learn to apply best practices in information literacy in order to locate, evaluate and integrate research for discussions on chiropractic and integrative care. A significant portion of the course will focus on crafting search strategies by breaking clinical questions down into Patient population, intervention, comparison, outcome (PICO) elements and using Boolean logic to identify articles in library databases. The levels of scientific evidence will be introduced and used to assess articles.

PHL 6420 30 hours, 2 credits
Principles of Chiropractic
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course explores the scientific reasons for the benefits of the chiropractic profession and paradigm. Historical and current hypotheses about chiropractic subluxations/joint dysfunctions are examined, as well as the scientific evidence supporting these hypotheses. Proposed etiologies of subluxations/joint dysfunctions, as well as possible mechanisms to explain why chiropractic adjusting/manipulation succeeds in improving health and wellness are investigated.

PHL 6430 15 hours, 1 credit
Literature Review
Prerequisite(s): PHL 6210
Corequisite(s): None
Prerequisite for: PHL 6510

This course will expand upon the concepts of Research Inquiry and develop the skills needed to critically appraise the scientific literature and identify gaps of knowledge. Students will be asked to perform a literature review based on their previously developed clinical question, locate the appropriate literature, and then critically appraise and summarize the key finding identified in the literature. Using the levels of evidence as a guide each study type will be broken down into key elements. The concept of reliability and validity will be explored as it relates to scientific investigation. Students will be asked to identify common types of bias found in scientific studies as well as identifying strategies used to mitigate such bias.

PHL 6510 30 hours, 2 credits
Research Methodology and Project Proposal
Prerequisite(s): PHL 6430
Corequisite(s): None
Prerequisite for: None

This lecture course casts the students in the role of lead investigator of their own line of clinical research. The course introduces students to the various aspects of

scientific study design, from creating clearly defined research objectives, through clinical protocol development. Individual research projects are based on the identified knowledge gaps they found in the previous two courses. Statistical methodology and interpretation concepts are introduced, along with means for controlling bias, and ensuring overall scientific validity. The culminating research project design is demonstrated through an end of trimester poster session presenting each research proposal.

PHL 6520 **15 hours, 1 credit**
The Scientific Basis for Chiropractic Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course integrates and expands upon the knowledge and skills acquired in previous principles of healthcare practice courses. The scientific basis for a patient-centered and scientifically based chiropractic philosophy will be presented. Course material draws from current peer-reviewed literature in multiple scientific fields establishing the neurologic effects associated with joint dysfunction and for chiropractic care of the symptomatic and asymptomatic patient.

PHL 6610 **30 hours, 2 credits**
Ethics, Professionalism, and Jurisprudence
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will provide students with foundational knowledge for responsible professional behavior that will enable them to reflect upon and address ethical and sociocultural issues that they will confront as a future Doctor of Chiropractic while operating within the legal framework of the healthcare environment. Applied case situations will be analyzed and evaluated to determine appropriate patient management in accordance with ethical reasoning, professional ethics, cultural competence, jurisprudence, and inter-professional communication related to health care decision-making. Students will be offered options to explore special regulatory requirements of the U.S. vs. Canadian Healthcare Systems.

PHY 6110 **15 hours, 1 credit**
Cell Physiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHY 6210

This course examines the physiologic functions of the cell including but not limited to cellular structure and function, reproduction (both mitosis and meiosis) and an introduction to endocrinology. Where appropriate, correlations with gross anatomy, histology, biochemistry, pathology, and chiropractic are included.

PHY 6210 **45 hours, 3 credits**
Foundations of Systems Physiology
Prerequisite(s): BCH 6110, PHY 6110
Corequisite(s): None
Prerequisite for: PHY 6310, PHY 6320

This is a course describing the functions and control of the physiology of the endocrine, reproduction, nervous, muscle and gastrointestinal systems.

PHY 6310 **45 hours, 3 credits**
Principles of Systems Physiology
Prerequisite(s): PHY 6210
Corequisite(s): None
Prerequisite for: CHS 6410

This is a course describing the physiological functions, control, and interactions of the heart, the cardiovascular system, the renal system, and the respiratory system. Additionally, the impact of exercise on all systems of the body will be discussed.

PHY 6320 **90 hours, 5 credits**
Principles of Physiopathology
Prerequisite(s): PHY 6210
Corequisite(s): None
Prerequisite for: CHS 6410, DIA 6420, PHY 6410

This course introduces students to pathology and the process of disease through the application of physiologic principles. Adaptive responses of cells and tissues, cell injury and death, neoplasia, abnormal immune responses, inflammation and repair, genetic disorders, and fluid and hematological disorders are explored using a problem-solving format.

PHY 6410 **90 hours, 5 credits**
Systems Pathology
Prerequisite(s): PHY 6320
Corequisite(s): None
Prerequisite for: DIA 6525, DIA 6635

In this course students will develop and reinforce comprehensive knowledge of disease processes and their causes and their clinical effects using a systems-based approach. Topics include the cardiac, pulmonary, gastrointestinal, muscular, endocrine, genitourinary and reproductive systems. Case-based approaches to structural abnormalities of cells and tissues at the gross and microscopic levels will be stressed.

RAD 6210 **45 hours, 1.5 credits**
Normal Imaging of the Spine and Extremities
Prerequisite(s): ANA 6140
Corequisite(s): ANA 6210
Prerequisite for: RAD 6310, RAD 6710

This course introduces the students to normal radiographic imaging of the spine and extremities. The course emphasizes the visualization of normal anatomical structures in standard diagnostic imaging procedures, common congenital anomalies, variants of normal, and mensuration procedures. Course content highlights the appropriate clinical indications and guidelines for diagnostic imaging of the spine and extremities.

RAD 6310 **30 hours, 1 credit**
Cross-Sectional Imaging Anatomy
Prerequisite(s): ANA 6140, ANA 6210, RAD 6210
Corequisite(s): ANA 6310
Prerequisite for: DIA 6420, RAD 6720

This course emphasizes normal cross-sectional anatomy as visualized on diagnostic imaging with a focus on computed tomography and magnetic resonance imaging of the head, neck, thorax, abdomen, spine, pelvis and extremities. Clinical correlation is made with concepts learned in previous coursework in normal radiographic anatomy, gross anatomy, and neuroanatomy. Students will learn to recognize and compare the appearance of normal structures from frequently encountered abnormalities.

RAD 6710 **60 hours, 3 credits**
Radiologic Science and Radiographic Examination
Prerequisite(s): RAD 6210
Corequisite(s): None
Prerequisite for: CLS 6850

This course addresses the principles of radiographic imaging and the biological effects. The course will emphasize the best available techniques for achieving desirable radiographs with minimal radiation to the patient through radiological positioning procedures of the spine and extremities.

RAD 6720 **30 hours, 1 credit**
Ultrasonographic Imaging
Prerequisite(s): DIA 6420, RAD 6310
Corequisite(s): None
Prerequisite for: CLS 6850

This course focuses on clinical conditions optimally visualized and diagnosed using ultrasonography. The students will learn and apply basic acoustic principles of the musculoskeletal system as they explore common conditions, including tendon abnormalities, ligament tears, peripheral nerves, soft tissue mass, muscle contractions, tissue artifacts, foreign bodies, and inflammatory rheumatological disorders.

RAD 6810 **30 hours, 2 credits**
Clinical Imaging Evaluation
Prerequisite(s): DIA 6545, DIA 6635, DIA 6625
Corequisite(s): None
Prerequisite for: None

This course focuses on the diagnostic imaging interpretation of real and simulated case studies. Students will refine their knowledge and interpretation skills of diagnostic imaging studies, with an emphasis on decision-making appropriate to the roles of chiropractors. Students will be expected to order specific studies based on the clinical presentation, to perform the diagnostic interpretation of the studies, and to make appropriate recommendations based on the results of the studies.

TCH 6110 45 hours, 1.5 credits
Introduction to Psychomotor and Palpation
Prerequisite(s): None
Corequisite(s): ANA 6130, ANA 6140
Prerequisite for: TCH 6210

A course where students are introduced to the basics of palpation and psychomotor skills. The location and identification of bony structures of the vertebral column, the pelvis, and the superficial musculature of the back and neck are emphasized. The concept of layer palpation is introduced. Specific psychomotor techniques with focus on the development of speed, dexterity, and understanding of the biomechanics related to both the doctor and patient are assessed. Palpation of major bony landmarks of the extremities will be introduced as well as the basic psychomotor skills needed to address extremity conditions. The information received in this course will lay the foundation for all future technique courses.

TCH 6210 75 hours, 3 credits
Introduction to Spinal Assessment and Manipulation
Prerequisite(s): TCH 6110
Corequisite(s): None
Prerequisite for: TCH 6310, TCH 6320, TCH 6410, TCH 6420, TCH 6511

This course integrates spinal biomechanics, assessment, and basic chiropractic adjusting skills. Emphasis is placed on static and motion palpation, developing tissue sense, enhancement of psychomotor skills, and basic spinal and pelvic adjustive techniques. The effects of a chiropractic adjustment, contraindications to spinal manipulation, and screening procedures are discussed. This course lays the foundation for future manipulation courses.

TCH 6310 60 hours, 2 credits
Spinal Assessment and Manipulation of the Pelvis and Lumbar Spine
Prerequisite(s): TCH 6210
Corequisite(s): None
Prerequisite for: None

In this course, students will learn the essential concepts and skills necessary to assess, palpate, and manipulate the lumbar spine and pelvis. Essential biomechanics and functional anatomy related to the lumbar spine and pelvis are emphasized. Patient assessment skills including history, range of motion, palpation, postural analysis, and soft tissue considerations are discussed. Continued emphasis is placed on tissue sense, psychomotor skills, and the doctor/patient interaction. Patient management strategies and treatment considerations are discussed. While focusing primarily on the lumbar spine and pelvis, this course provides an opportunity for enhancement and review of previously learned spinal manipulative techniques.

TCH 6320 30 hours, 1 credit
Lower Extremity Assessment and Manipulation
Prerequisite(s): ANA 6210, TCH 6210
Corequisite(s): None
Prerequisite for: None

This course focuses on lower extremity biomechanics and common patient presentations related to injuries of the hip, knee, ankle, and foot. Patient management strategies are discussed with emphasis on mechanical diagnosis, including patient history, range of motion, osseous and soft tissue palpation, and postural and gait analysis. Treatment of these findings are introduced with emphasis on the instruction, delivery, and practice of lower extremity manipulations and mobilizations.

TCH 6330 30 hours, 2 credits
Foundations of Biomechanics
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: DIA 6415, DIA 6910, TCH 6611

This course will present the student with an overview of biomechanical forces, moments and biomechanical properties. Special emphasis will be placed on cartilage, bone, ligaments and muscle. Structure and function of the vertebral column will be reviewed and biomechanics of each region of spine, ribs and temporomandibular joint will be discussed. Lastly, the biomechanics of all the upper and lower extremity joints will be presented.

TCH 6410 60 hours, 2 credits
Spinal Assessment and Manipulation of the Thoracic Spine and Ribs
Prerequisite(s): TCH 6210
Corequisite(s): None
Prerequisite for: None

In this course, students will learn the essential concepts and skills necessary to assess, palpate, and manipulate the thoracic spine and ribs. Essential biomechanics and functional anatomy related to the thoracic spine and costal structures are emphasized. Patient assessment

skills including history, range of motion, palpation, postural analysis, and soft tissue considerations are discussed. Continued emphasis is placed on tissue sense, psychomotor skills, and the doctor/patient interaction. Patient management strategies and treatment considerations are discussed. While focusing primarily on the thoracic spine and ribs, this course will provide an opportunity for enhancement and review of previously learned spinal manipulative techniques.

TCH 6420 30 hours, 1 credit
Upper Extremity Assessment and Manipulation
Prerequisite(s): ANA 6210, TCH 6210
Corequisite(s): None
Prerequisite for: None

This course focuses on upper extremity biomechanics and common patient presentations related to injuries of the shoulder, elbow, wrist, and hand. Patient management strategies are discussed with emphasis on mechanical diagnosis, including patient history, range of motion, osseous and soft tissue palpation, and postural analysis. Treatment of these findings are introduced with emphasis on the instruction, delivery, and practice of upper extremity manipulations and mobilizations.

TCH 6515 30 hours, 1 credit
Myofascial Therapy I - Spine
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: TCH 6614

This course provides the students with a foundation for hands-on soft tissue assessment and treatment focused on the head, neck, and spine. Students will gain an understanding of the muscular and myofascial system, and how soft tissue interventions can improve a person's function and well-being. Functional movement screens and assessments, postural analysis, and various manual therapy methods are presented. Instrument-assisted soft tissue mobilization is emphasized using the ConnecTX instrument and therapy system, myofascial release, trigger point therapy, and pin and stretch techniques are also highlighted. Rehabilitation strategies are discussed in relation to enhancing the effectiveness of the treatments provided.

TCH 6516 45 hours, 2 credits
Physical Rehabilitation of Spinal Disorders
Prerequisite(s): DIA 6415
Corequisite(s): DIA 6530, DIA 6545
Prerequisite for: TCH 6613, TCH 6710

This course focuses on principles of exercise and the use of exercise for the rehabilitation and treatment of spinal musculoskeletal conditions. Using an evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, taping protocols, and neural gliding techniques. The development of treatment plans, integration and progression of rehabilitation methods, proper patient education, self-management options and other home care strategies are highlighted.

TCH 6517 45 hours, 2 credits
Therapeutic Modalities
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides a practical approach of various therapeutic modalities commonly found in chiropractic practice that are used for pain control, reduction of inflammation, enhanced healing, muscle strains and spasms, and muscle strengthening. Lecture material will cover physiologic effects, indications, contraindications and proper techniques for using the covered modalities while laboratory time will provide the opportunity to practice the application of the modalities for a variety of conditions to different areas of the body.

TCH 6611 30 hours, 1 credit
Chiropractic Management of Disc Disorders
Prerequisite(s): DIA 6545, TCH 6330
Corequisite(s): None
Prerequisite for: None

This course covers the diagnosis, treatment, and management of spinal disc disorders. Strong emphasis will be placed on assessment and treatment utilizing flexion distraction decompression and end range loading techniques.

TCH 6613 45 hours, 2 credits
Physical Rehabilitation of Extremity Disorders
Prerequisite(s): TCH 6516
Corequisite(s): DIA 6625
Prerequisite for: TCH 6730

This course builds on the information covered in the spinal rehabilitation course by focusing on the use of exercise for the rehabilitation and treatment of musculoskeletal conditions of the extremities. Using an

evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, taping protocols, and neural gliding techniques. Rehabilitation methods are integrated with patient education, self-management options and home care strategies.

TCH 6614 **30 hours, 1 credit**
Myofascial Therapy II - Extremities
Prerequisite(s): TCH 6515
Corequisite(s): None
Prerequisite for: None

Building upon previous myofascial coursework, this course emphasizes myofascial release, trigger point therapy, pin and stretch therapy, and instrument assisted soft tissue manipulation. The use and interpretation of functional movement assessments are discussed in correlation with common patient presentations of upper and lower extremity conditions. The ConnecTX instrument and therapy system will be emphasized. The integration of other therapeutic approaches, including rehabilitation strategies, are discussed in relation to enhancing the effectiveness of the treatments provided.

TCH 6710 **30 hours, 1 credit**
Integrative Strategies in Manual Therapy
Prerequisite(s): DIA 6545, TCH 6516
Corequisite(s): DIA 6710, DIA 6720
Prerequisite for: CLS 6850

This course introduces students to various patient populations and/or patients with specific needs that the Doctor of Chiropractic may encounter in practice. The course will focus on modifications that should be made to the delivery of Diversified adjustments while also highlighting key features of other techniques commonly used in the treatment of these patients. The course will introduce students to chiropractic approaches to manage those conditions discussed in previous and concurrent coursework where chiropractic management or co-management of those conditions is warranted.

ELECTIVE COURSE DESCRIPTIONS

AST 6535 **30 hours, 2 credits**
Women's Health
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to provide students with in-depth knowledge regarding aspects of women's healthcare, covering anatomy, biology, and general health. The course will include training on conditions unique to women throughout the lifespan. While there will be a review of female anatomy, the course is predominately focused on medical science and applications specific to women's health. The course also covers topics including patient education, female sexuality, perimenopause, pregnancy, and infertility.

AST 6530 **30 hours, 2 credits**
Perinatal Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to provide the student with the knowledge required to assess and provide safe and appropriate chiropractic care to the pregnant and postpartum patient. Students will be taught to identify signs and symptoms suggesting pregnancy-specific conditions along with the appropriate procedures to follow-up with such conditions. Students will learn additional techniques and gain more experience treating the pregnant patient. Emphasis will be placed on biomechanical changes that occur throughout pregnancy, how these changes can manifest as physical complaints, common musculoskeletal complaints unique or common to the pregnant and postnatal patient, and the appropriate chiropractic care to address these complaints.

PHY 6515 **30 hours, 2 credits**
Exercise Physiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Exercise physiology pertains to the functioning of the human body during exercise. The purpose of this course is to increase the overall knowledge of the student about human physiology and the adaptations that occur during exercise. Emphasis is placed on bioenergetics as well as circulatory, respiratory, and neuromuscular responses to the physical stress of exercise. Also discussed are the effects of environmental factors and ergogenic aids on athletic performance. Understanding the interactions of metabolism, circulation, and structural adaptations in response to exercise and training are required to be an effective teaching or health care professional.

TCH 6735 **30 hours, 2 credits**
Caring for Athletes at Sporting Events
Prerequisite(s): AST 6625
Corequisite(s): None
Prerequisite for: None

This course is designed to familiarize the student with the assessment and management of common sports injuries encountered at sporting events. The practical aspects of the required equipment, care for the athlete, prevention, team dynamics, and reconditioning of athletic injuries will be stressed. The role of the athletic training profession in the sports medicine system will also be discussed.

DIA 6820 **30 hours, 2 credits**
Advanced Pediatric Care
Prerequisite(s): DIA 6708 (current curriculum) DIA 6710 (curriculum starting May 2024)
Corequisite(s): None
Prerequisite for: None

This course is designed to provide the student with advanced knowledge and experience required to assess and provide safe and appropriate chiropractic care to the pediatric patient. Students will be taught the necessary modifications to the chiropractic manipulative therapies when treating the pediatric patient and will be introduced to techniques commonly used in pediatric chiropractic practice. The course will also seek to educate the student on the neuromusculoskeletal complaints unique or common to the pediatric patient and the appropriate chiropractic care to address these complaints. Students will receive additional training in identifying pediatric-specific conditions and the appropriate chiropractic or collaborative care needed to address these complaints.

TCH 6730 **30 hours, 2 credits**
Active Rehabilitation of Sports Injuries
Prerequisite(s): TCH 6613
Corequisite(s): None
Prerequisite for: None

Using an evidence-based approach, students will learn to develop a rehabilitation program with emphasis on stretching, strengthening, proprioceptive awareness, aerobic exercise, stabilization methods, end-range loading, and neural gliding techniques. Emphasis will be placed on common injuries sustained during the training or athletic competitions of various sports. The students will be familiarized with integrating rehabilitation methods, patient education, self-management options and other home care strategies.

SAMPLE SCHEDULE – STUDENTS ENROLLED PRIOR TO MAY 2024
DOCTOR OF CHIROPRACTIC CURRICULUM

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
First Trimester					
ANA 6104	Neuroscience I	4	2	90	5
ANA 6105	Gross Anatomy I	3	4	105	5
ANA 6110	Cell and Tissue Biology	3	2	75	4
BCH 6101	Principles of Biochemistry	3	0	45	3
PHL 6101	Chiropractic Philosophy & History	2	0	30	2
PHL 6110	Foundations of Professional Development	1	0	15	1
PHY 6105	Cell Physiology	1	0	15	1
TCH 6101	Chiropractic Technique I: Psychomotor Skills	0	2	30	1
TCH 6102	Chiropractic Technique II: Introduction to Palpation	0	2	30	1
TOTAL		17	12	435	23
Second Trimester					
ANA 6204	Gross Anatomy II	3	4	105	5
ANA 6205	Neuroscience II	4	2	90	5
BCH 6203	Biochemistry of Nutrition and Metabolism	2	0	30	2
PHL 6203	Issues in Chiropractic Research	1	0	15	1
PHY 6203	Systems Physiology	5	0	75	5
RAD 6203	Spinal Radiology	0	1	15	.5
TCH 6203	Chiropractic Technique III: Spinal Assessment and Introduction to Techniques	2	4	90	4
TOTAL		17	11	420	22.5
Third Trimester					
ANA 6304	Gross Anatomy III	3	4	105	5
AST 6304	Basic Human Nutrition I	2	0	30	2
MPH 6301	Clinical Microbiology	3	2	75	4
PHL 6308	Fundamentals for Chiropractic Research Literacy	2	0	30	2
PHY 6302	Principles of Physiopathology	4	2	90	5
RAD 6304	Extremities Radiology	0	1	15	.5
TCH 6304	Chiropractic Technique IV	2	4	90	4
TCH 6305	Extremities Technique I	1	2	45	2
TOTAL		17	15	480	24.5

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
Fourth Trimester					
DIA 6403	Patient Assessment Methods I	3	4	105	5
MPH 6404	Public Health and Wellness	4	0	60	4
PHL 6410	Chiropractic Theories	1	0	15	1
PHL 6412	Ethical Decision Making in Clinical Care	1	0	15	1
PHY 6404	Musculoskeletal Physiopathology	4	2	90	5
PHY 6405	Visceral Pathology	3	2	75	4
TCH 6406	Extremities Technique II	1	2	45	2
TCH 6407	Chiropractic Technique V	2	4	90	4
TOTAL		19	14	495	26
Fifth Trimester					
AST 6502	Emergency Procedures	.5	.5	11	.5
AST 6504	Basic Human Nutrition II	1	0	15	1
DIA 6502	Patient Assessment Methods II	2	4	90	4
DIA 6508	Clinical Laboratory Diagnosis	3	2	75	4
RAD 6504	Bone and Joint Imaging	4	4	120	6
TCH 6501	Soft Tissue Techniques	2	2	60	3
TCH 6502	ConnecTX Therapy	0	2	30	1
TCH 6508	Chiropractic Technique VI	2	4	90	4
TOTAL		14.5	18.5	491	23.5
Sixth Trimester					
ATP 6603	Passive Care	1	2	45	2
ATP 6604	Active Care	1	2	45	2
BPM 6630	Practice Management and the Law	2	0	30	2
DIA 6605	Correlative Patient Assessment	0	4	60	2
DIA 6606	General Diagnosis	3	0	45	3
PHL 6605	The Scientific Basis for Chiropractic Care	2	0	30	2
PHL 6607	Patient Education	2	0	30	2
RAD 6608	Principles of Diagnostic Imaging	2	0	30	2
RAD 6610	Radiographic Examination	0	2	30	1
TCH 6604	Flexion Distraction Technique	2	2	60	3
TCH 6605	Evidence Based Clinical Case Management	2	2	60	3
TOTAL		17	14	465	24

Course No.	Title	Lecture Hours	Lab Hours	Contact Hours	Credits Hours
Seventh Trimester					
AST 6705	Clinical Nutrition	2	0	30	2
BPM 6703	Coding, Billing & Documentation	2	0	30	2
BPM 6704	Business & Practice Management	1	0	15	1
CLS 6710	Introduction to Clinical Services	2	6	120	5
DIA 6708	Human Developmental Diagnosis	4	0	60	4
RAD 6705	Advanced Imaging	2	2	60	3
TCH 6706	Diagnosis and Management of Extremities Conditions	2	2	60	3
TCH 6708	Contemporary Concepts in Chiropractic	0	2	30	1
TOTAL		15	12	405	21
Eighth Trimester					
AST 6802	Clinical Psychology	2	0	30	2
AST 6806	Concepts in Pharmacology	2	0	30	2
BPM 6830	Applied Ethics of Chiropractic	1	0	15	1
CLS 6804	Clinical Service Phase I	2	20	330	12
TOTAL		7	20	405	17
Ninth Trimester					
BPM 6903	Getting Into Practice	2	0	30	2
CLS 6904	Clinical Service Phase II	2	28	450	16
TOTAL		4	28	480	18
Tenth Trimester					
BPM 7007	Marketing Strategies for Healthcare Professionals	2	0	30	2
CLS 7006	Clinical Service Phase III	2	26	420	15
TOTAL		4	26	450	17
TOTAL CORE HOURS		131.5	170.5	4,526	216.5
*TOTAL ELECTIVE COURSE HOURS (A minimum of 9 elective credit hours must be completed after completion of 4th trimester coursework)		9		135	9
TOTAL PROGRAM HOURS		141.5	170.5	4,661	225.5

COURSE DESCRIPTIONS

ANA 6104 **90 hours, 5 credits**
Neuroscience I
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: ANA 6205, PHL 6605

A multidisciplinary approach to neuroscience that integrates relevant topics in anatomy and physiology. Lectures will be supplemented by laboratory exercises in neuroanatomy and neurophysiology, with an emphasis on clinical correlation and an introduction to the use of case studies. The neuroanatomical and neurophysiological basis of chiropractic practice will also be explored.

ANA 6105 **105 hours, 5 credits**
Gross Anatomy I
Prerequisite(s): None
Corequisite(s): TCH 6102
Prerequisite for: ANA 6304, PHL 6605, TCH 6203

An integrated sequence of courses covering the gross anatomy of the human body, with a heavy emphasis on functional neuromusculoskeletal anatomy of the limbs and trunk, including osteology, arthrology, muscle action, innervation and blood supply. The sequence also includes a thorough examination of the visceral contents of the head and neck, thorax, abdomen, pelvis and perineum, with particular reference to clinical relevancy of portal-of-entry physicians.

ANA 6110 **75 hours, 4 credits**
Cell and Tissue Biology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course that gives the student an essential understanding of the structures and functions of human body's tissues, organs, and systems. Focus is on the fundamental characteristics of the mammalian cell. The student will gain an appreciation of cellular structure and function, cell specialization, and the contribution of cells to the maintenance of homeostasis. Where appropriate, correlations with gross anatomy, physiology, biochemistry, pathology, and chiropractic are included.

ANA 6204 **105 hours, 5 credits**
Gross Anatomy II
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHL 6605, RAD 6304, TCH 6305, TCH 6407

This course represents the second part of an integrated sequence covering the gross anatomy of the human body, with heavy emphasis on functional neuromusculoskeletal anatomy. The functional anatomy of the appendicular and axial skeletons is emphasized, including muscle attachments, actions, innervations, blood supply, and arthrology. The sequence also includes a comprehensive examination of the visceral contents of the head and neck, thorax, abdomen, pelvis and perineum, with particular reference to clinical relevancy to portal-of-entry physicians.

ANA 6205 **90 hours, 5 credits**
Neuroscience II
Prerequisite(s): ANA 6104
Corequisite(s): None
Prerequisite for: PHL 6605

A continued multidisciplinary approach, integrating relevant topics in neuroanatomy and physiology with more extensive coverage of neurological diagnosis. Lectures will continue to be supplemented by lab exercises in neuroanatomy and neurophysiology, again with an emphasis on clinical correlation. Numerous case studies will be examined in both lecture and laboratory. The neuroanatomical and neurophysiological basis of chiropractic practice will also be explored.

ANA 6304 **105 hours, 5 credits**
Gross Anatomy III
Prerequisite(s): ANA 6105
Corequisite(s): None
Prerequisite for: PHL 6605

A lecture and laboratory course focusing on the detailed study of abdomen, head and neck. Some of the disease processes involving these structures are discussed in the lecture component of the course. Laboratory parallels the lecture portion with emphasis on the dissection of these structures. This will enable the students to interpret the normal and the abnormal findings of these regions in clinical settings.

AST 6304 **30 hours, 2 credits**
Basic Human Nutrition I
Prerequisite(s): BCH 6101
Corequisite(s): None
Prerequisite for: AST 6504

This lecture course deals with the study of food sources of basic nutrients for human life. The digestion and metabolism of carbohydrates, lipids and proteins, as well as the intermediary metabolism, will be reviewed. Emphasis is placed on the role and requirements of minerals, vitamins, and common herbs in human nutrition. Health effects of sugars, lipids, and proteins will be discussed.

AST 6502 **11 hours, .5 credit**
Emergency Procedures
Prerequisite(s): ANA 6204, ANA 6205, ANA 6304
Corequisite(s): None
Prerequisite for: None

This course is designed to prepare students to recognize and provide an effective response to the most common medical emergencies in the workplace and community. Effective communication relating to coordination of an emergency response and knowledge and proficiency in CPR/AED and first aid will be emphasized.

AST 6504 **15 hours, 1 credit**
Basic Human Nutrition II
Prerequisite(s): AST 6304
Corequisite(s): None
Prerequisite for: AST 6705, AST 6715, AST 6610

This lecture course deals with nutrition and weight control; causes and treatment of obesity; eating disorders – Anorexia Nervosa and Bulimia Nervosa; vitamin interactions, deficiencies and toxicity; mineral deficiencies and toxicities; nutrition during infancy, childhood, adolescence, and nutrient needs of older adults; nutrition during lactation, and malnutrition and pregnancy; and nutrition and metabolic responses during severe stress.

AST 6705 **30 hours, 2 credits**
Clinical Nutrition
Prerequisite(s): AST 6504
Corequisite(s): None
Prerequisite for: None

This lecture course deals with life, diet, and disease. Topics to be discussed include: normal nutrition, vegetarian diets, and vitamin supplementation; disorders of nutrition; hyperlipidemia and coronary artery disease, hypertension, diet and cancer; osteoporosis, and nutritional anemias; prevalence and types of malnutrition; nutritional support of special medical problems – in renal failure, liver disease, and pulmonary disease; presentation of case studies; obesity, hyperlipidemia and diabetes, alcohol abuse and nutrient deficiencies; dietary management of gout, malabsorption syndrome, and protein-calories malnutrition.

AST 6802 **30 hours, 2 credits**
Clinical Psychology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Clinical psychology in general practice, general concepts, psychological assessment, mental/ emotional disorders, including standardized diagnostic criteria and behavioral management strategies will be covered. This course will focus on a biological and psychosocial perspective on human behavior and its application in clinical practice.

AST 6806 **30 hours, 2 credits**
Concepts in Pharmacology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

An introductory lecture series presenting basic principles of clinical pharmacology. The course is designed to familiarize the student with the most commonly used pharmaceuticals, their actions, indications, contraindications, side effects and adverse effects as well as the chiropractic implications of same.

ATP 6603 **45 hours, 2 credits**
Passive Care
Prerequisite(s): None
Corequisite(s): TCH 6604, TCH 6605
Prerequisite for: None

This course provides a description of various modalities commonly found in practice that are used for pain control, edema reduction, enhanced healing, muscle spasm reduction, and muscle strengthening. Lecture material will cover physiologic effects, indications, contraindications, and proper techniques for using the covered modalities while laboratory time will provide the opportunity to practice the application of the modalities for a variety of conditions to different areas of the body.

The National Board exam in Physiotherapy will also be discussed.

ATP 6604 **45 hours, 2 credits**
Active Care
Prerequisite(s): None
Corequisite(s): TCH 6604, TCH 6605
Prerequisite for: TCH 6706

A lecture and lab course focusing on active care for the patient, ranging from the use of splints and supports to exercise qualification, indications, and prescription. Emphasis placed on patient assessment and individual application of appropriate active-based therapeutic measures, as well as patient education and home care program prescription.

BCH 6101 **45 hours, 3 credits**
Principles of Biochemistry
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: BCH 6203, AST 6304

A lecture course introducing the basic chemical components found in the diet and/or utilized by the body. The structure and major biochemical functions of carbohydrates, lipids, nucleic acids, proteins, hormones and vitamins are explored. The study of enzymes, including digestive enzymes, will be introduced.

BCH 6203 **30 hours, 2 credits**
Biochemistry of Nutrition and Metabolism
Prerequisite(s): BCH 6101
Corequisite(s): None
Prerequisite for: None

A lecture course involving the study of the major biochemical pathways involving carbohydrates, lipids, amino acids, and nucleic acids. The relationship of these mechanisms to nutrition and to the health of the human body is stressed. Nutritional deficiencies and the resulting clinical consequences are introduced.

BPM 6630 **30 hours, 2 credits**
Practice Management and the Law
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A course designed to encourage the Doctor of Chiropractic student to prepare for their professional career. This course will expose the student to various topics related to Chiropractic practice issues, standards of care, practice guidelines, and jurisprudence. Further, students will be exposed to career opportunities within Chiropractic and participate in community service.

BPM 6703 **30 hours, 2 credits**
Coding, Billing & Documentation
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course provides students with an in-depth understanding of the American Health Care System and strategies to successfully receive reimbursement for their professional services from third-party payers. Topics covered include how to analyze the reimbursement environment before beginning a practice in a particular geographic area; how to accurately use diagnostic and procedure codes; how to efficiently document care in order to minimize legal liability and delays or denials of insurance claims; and how to create a rational fee schedule for a chiropractic practice. Teaching techniques include lecture and readings, and practical assignments that will allow students to gain first-hand experience in billing and coding that they will be able to apply immediately when they begin their chiropractic practices.

BPM 6704 **15 hours, 1 credit**
Business & Practice Management
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This blended, one-credit course will provide the student with an opportunity to develop skills and competencies vital to establishing and running a successful chiropractic practice, whether as a solo practitioner, associate, or in any other practice model. Topics to be considered include professionalism, personal finance, business plans, career development, employee management, practice management, and effective communications.

BPM 6830 **15 hours, 1 credit**
Applied Ethics of Chiropractic
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course teaches the foundational principles of professionalism along with the ethics and virtues of chiropractic care. Students will demonstrate knowledge

of setting and maintaining healthy boundaries with patients; strategies to prevent the financial and sexual abuse of patients and how to maintain a healthy work - leisure balance while avoiding burnout and other impairments to healthy practice.

BPM 6903 **30 hours, 2 credits**
Getting Into Practice
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course focuses on topics related to getting started in chiropractic practice. The goal of the class is to expose the student to information that will be needed to make effective decisions about options for beginning a chiropractic career, with the focus on topics related to starting a chiropractic practice. Information provided is intended to furnish students with a sound foundation for making appropriate choices and developing professional relationships in order to begin a successful career in the chiropractic field.

BPM 7007 **30 hours, 2 credits**
Marketing Strategies for Healthcare Professionals
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A business course designed for students in the Doctor of Chiropractic degree program in which marketing methods will be presented and discussed. This course will assist students in identifying the marketing trends that are pertinent in the healthcare industry and how to implement these ideas. We will also use strategy and business planning concepts that will allow future practitioners to become entrepreneurs. As the healthcare market evolves it is necessary for the healthcare professional to understand the principles and applications of marketing in the healthcare environment. This will be a graduate level marketing class with a healthcare concentration.

CLS 6710 **120 hours, 5 credits**
Introduction to Clinical Services
Prerequisite(s): Successful completion of all course work through the sixth trimester, except for BPM 6630, RAD 6608, and RAD 6610.
Corequisite(s): None
Prerequisite for: CLS 6804

In this introductory clinical service course, students will participate in campus community patient care experiences supported by lecture. Students utilize the patient care skills learned in previous trimesters. Under Northeast College of Health Sciences Doctor Driven/Patient-Centered model, students are engaged in patient/case management which includes, but is not limited to, history, examination, diagnosis, treatment, outcome assessment, assessment of progress, and appropriate documentation practices.

CLS 6804 **330 hours, 12 credits**
Clinical Service Phase I
Prerequisite(s): Must have completed all course work through the seventh trimester.
Corequisite(s): None
Prerequisite for: CLS 6904

Under close supervision and guidance of licensed faculty clinicians, interns are engaged in the various aspects of clinical practice, including the evaluation and management of health center patients. As students achieve quantitative procedural requirements, the faculty provides qualitative evaluation and feedback regarding developing competencies. The practical aspects of patient care are supplemented by a variety of presentations and exercises intended to enhance and reinforce clinical knowledge and skills.

CLS 6904 **450 hours, 16 credits**
Clinical Service Phase II
Prerequisite(s): CLS 6804
Corequisite(s): None
Prerequisite for: CLS 7006

Students continue to be progressively engaged by clinical faculty members in the various aspects of clinical practice while receiving periodic qualitative evaluation and feedback regarding their development of required clinical competencies. The practical experiences of patient interactions are supplemented by presentations and exercises intended to enhance and reinforce clinical knowledge and skills.

CLS 7006 **420 hours, 15 credits**
Clinical Service Phase III
Prerequisite(s): CLS 6904
Corequisite(s): None
Prerequisite for: None

Students continue to be engaged by faculty clinicians in the various aspects of clinical practice while completing

their quantitative and qualitative clinical graduation requirements. Practical aspects of patient care experiences are supplemented by presentations and exercises intended to assist students' transition to the field.

DIA 6403 **105 hours, 5 credits**
Patient Assessment Methods I
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: DIA 6502, DIA 6605, DIA 6606, TCH 6604, TCH 6706

A course designed to introduce the chiropractic student to the components and techniques of history taking, the development of a differential diagnosis list, the complete neurological evaluation of central and peripheral neural structures, and the comprehensive orthopedic and vascular evaluations of the spine and extremities. All course topics are integrated by chief complaint and history taking.

DIA 6502 **90 hours, 4 credits**
Patient Assessment Methods II
Prerequisite(s): DIA 6403
Corequisite(s): RAD 6504
Prerequisite for: DIA 6605, DIA 6606

A lecture and laboratory course in which the student further refines case history-taking skills and develops examination skills of the integumentary, respiratory, cardiovascular, gastrointestinal, genitourinary, and endocrine systems. Normal findings as well as common abnormal findings will be presented and discussed.

DIA 6508 **75 hours, 4 credits**
Clinical Laboratory Diagnosis
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course that focuses on the pathophysiologic basis and clinical interpretation of diagnostic laboratory tests. Emphasis is placed upon the clinical presentation and relevant laboratory findings in order to establish a differential or definitive diagnosis. Routine lab testing – including urinalysis, CBC, blood chemistries, serology, and immunology – will be presented. Special laboratory procedures and new laboratory methodologies will also be introduced. Venipuncture technique will be presented in the laboratory portion.

DIA 6605 **60 hours, 2 credits**
Correlative Patient Assessment
Prerequisite(s): DIA 6403, DIA 6502
Corequisite(s): TCH 6605
Prerequisite for: None

A laboratory course focusing on organizing a strategy to evaluate and diagnose various patient complaints which may present to the chiropractor's office for an initial diagnosis. Emphasis will be placed upon the details and practical application of history taking, patient interaction, formulating a differential diagnosis, selecting appropriate diagnostic examination procedure(s), and interpreting collective data to formulate a final diagnosis for the patient. Appropriate action steps such as treatment and co-management plans will be mentioned.

DIA 6606 **45 hours, 3 credits**
General Diagnosis
Prerequisite(s): DIA 6403, DIA 6502, RAD 6504
Corequisite(s): None
Prerequisite for: None

A lecture course focusing on common chief complaints which may present to the chiropractors office for an initial diagnosis. Emphasis will be placed upon the details and practical application of history taking, patient interaction, formulating a differential diagnosis, selecting appropriate diagnostic examination procedure(s) and interpreting collective data to formulate a final diagnosis for the patient. Appropriate treatment and co-management plans will be mentioned.

DIA 6708 **60 hours, 4 credits**
Human Developmental Diagnosis
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A didactic lecture course focusing on surveying normal and abnormal development of the human throughout life. Major topic areas are obstetrics, pediatrics, and geriatrics. Common physical problems and disorders of conception, pregnancy, infancy, childhood, and the geriatric patient are discussed with emphasis on recognizing those disorders necessitating referral or co-management and where chiropractic care of the individual is applicable. A two-hour presentation on child abuse is included.

MPH 6301 **75 hours, 4 credits**
Clinical Microbiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course that focuses on the structure, biochemistry, and genetics of organisms associated with human infectious disease. Modes of transmission, epidemiology, mechanisms of specific and nonspecific host resistance, methods of disinfection and prevention are emphasized.

MPH 6404 **60 hours, 4 credits**
Public Health and Wellness
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is an overview of current health topics and information as described in Healthy People 2030 and how personal responsibility and lifestyle play a role in the health and wellness of a person (patient) and therefore in the health of the community. This course will discuss the basic principles and perspectives involved in disease prevention (both acute and chronic) and promotion of healthy activities, lifestyles and behavior, and the role of the doctor of chiropractic in this promotion of health and wellness.

Topics will include, but not be limited to: physical exercise; overweight, obesity and nutrition; tobacco use; substance abuse; acute and chronic disease; sexual responsibility and STIs including AIDS; environmental quality (food safety, clean potable water, sewage treatment, and air pollution). Emphasis will be on how the chiropractor can relate to these topics. There will be a discussion of government agencies involved in community health.

PHL 6101 **30 hours, 2 credits**
Chiropractic Philosophy & History
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHL 6605

A lecture course in which the history of chiropractic is traced from its origins to the present day. The basic concepts of chiropractic philosophy as they were originally formulated and as they have evolved to present-day scientific thinking are discussed.

PHL 6110 **15 hours, 1 credit**
Foundations of Professional Development
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A course for students entering the Doctor of Chiropractic program designed to support the student's development as a healthcare provider and expand their understanding and appreciation of the expectations as a member of the Chiropractic profession.

PHL 6203 **15 hours, 1 credit**
Issues in Chiropractic Research
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHL 6605

This course will provide chiropractic students with the basic knowledge and skills necessary to be an educated consumer of the professional literature. It will enhance the student's understanding of evidence-based practice and the value of research to the practicing chiropractor and to the chiropractic profession.

PHL 6308 **30 hours, 2 credits**
Fundamentals for Chiropractic Research Literacy
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course introduces students to various methods, techniques, and skills for searching and locating relevant information by using chiropractic topics, subjects and current evets surrounding the profession. Students will search for information on both historical chiropractic philosophy, modern philosophical discourse, and a musculoskeletal disease or condition. A significant portion of the course will focus on crafting search appropriate questions, generating search strings using Boolean logic, PICO, and applying information literacy skills to library databases. The subject matter searched will apply to the philosophical, historical and modern issues within the profession for both allopathic and conservative care. Students have the opportunity to expand their knowledge of medical terminology, chiropractic lexicon, and acquire awareness and knowledge of how these concepts intertwine with scholarly sources and information literacy. The goal of this course is to allow students the opportunity to expand their knowledge on chiropractic topics while

using scholarly sources to support their academic research.

PHL 6410 **15 hours, 1 credit**
Chiropractic Theories
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This on ground lecture course examines the scientific reasons for the benefits of the chiropractic profession and paradigm. Historical and current hypotheses about chiropractic subluxations are surveyed as well as the scientific evidence supporting these hypotheses. Also surveyed are the purported etiologies of subluxations, as well as possible mechanisms to explain why chiropractic adjusting/manipulation succeeds in improving health and well-being.

PHL 6412 **15 hours, 1 credit**
Ethical Decision Making in Clinical Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

The course will provide students with foundational knowledge for responsible professional behavior that will enable them to knowledgeably reflect upon and address ethical and socio-cultural issues that they will confront during their training as a future doctor of chiropractic. This ethics course involves teaching of basic knowledge and skills in ethical reasoning, professional ethics, cultural competence and inter-professional communication related to health care decision-making.

PHL 6605 **30 hours, 2 credits**
The Scientific Basis for Chiropractic Care
Prerequisite(s): ANA 6104, ANA 6105, ANA 6204, ANA 6205,
ANA 6304, PHL 6101, PHL 6203
Corequisite(s): None
Prerequisite for: None

The Scientific Basis for Chiropractic Care is a capstone course that will integrate and expand on the knowledge and skills acquired in previous principles courses. The scientific basis for a patient-centered and scientifically based chiropractic philosophy will be presented. The course material represents the current peer-reviewed literature in multiple scientific fields establishing the basis of the subluxation and for chiropractic care of the symptomatic and asymptomatic patient.

PHL 6607 **30 hours, 2 credits**
Patient Education
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Developing excellent communication skills is important for giving high-quality patient care and building a prosperous practice, and vital in risk-management strategies. The goal of this course is to help students to build a successful, efficient, and ethical patient-centered practice based upon effective communications between the doctor and patient.

PHY 6105 **15 hours, 1 credit**
Cell Physiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course that examines the physiologic functions of the cell including but not limited to cellular structure and function, cell adhesion molecules, reproduction (both mitosis and meiosis), and an introduction to endocrinology. Where appropriate, correlations with gross anatomy, physiology, biochemistry, pathology, and chiropractic are included.

PHY 6203 **75 hours, 5 credits**
Systems Physiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: PHY 6302

A lecture course that examines the function of the cell as well as the nervous, muscular, cardiovascular, respiratory, renal, digestive, endocrine, and reproductive systems. The control of each of these physiological systems is discussed and analyzed, with an emphasis on clinical ramifications.

PHY 6302 **90 hours, 5 credits**
Principles of Physiopathology
Prerequisite(s): PHY 6203
Corequisite(s): None
Prerequisite for: PHY 6404, PHY 6405

A lecture and laboratory course that gives the student a basic understanding of physiology at the cell and tissue

level and provides an introduction to pathology and the process of disease through the application of physiologic principles. Adaptive responses of cells and tissues, cell injury and death, neoplasia, immune response, inflammation and repair, genetic disorders, and fluid and hematological disorders are explored using a problem-solving format.

PHY 6404 **90 hours, 5 credits**
Musculoskeletal Physiopathology
Prerequisite(s): PHY 6302
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course that provides for the study of normal physiology and pathology of bone, joint, muscle and endocrine systems. This will lead the student to a practical understanding of normal function, dysfunction, and disease. Laboratory exercises focus on physiologic, pathologic, radiographic, and clinical presentations. Through correlating lecture material and the laboratory experience, the student will be expected to develop a practical knowledge of the musculoskeletal (MS) system.

PHY 6405 **75 hours, 4 credits**
Visceral Pathology
Prerequisite(s): PHY 6302
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course in which the student will develop comprehensive knowledge of disease processes, their causes and their clinical effects. Structural abnormalities of the cells and tissues at the gross and microscopic levels will be stressed.

RAD 6203 **15 hours, .5 credit**
Spinal Radiology
Prerequisite(s): None
Corequisite(s): TCH 6203
Prerequisite for: RAD 6304

A laboratory course with focus upon conventional radiology of the spine and pelvis. The course emphasizes normal anatomy, common congenital anomalies, variants of normal and mensuration procedures of the spine and pelvis.

RAD 6304 **15 hours, .5 credit**
Extremities Radiology
Prerequisite(s): ANA 6204, RAD 6203
Corequisite(s): TCH 6305
Prerequisite for: None

A laboratory course with focus upon conventional radiology of the upper and lower extremities. The course emphasizes normal anatomy, common congenital anomalies, variants of normal, and mensuration procedures of the extremities.

RAD 6504 **120 hours, 6 credits**
Bone and Joint Imaging
Prerequisite(s): None
Corequisite(s): DIA 6502
Prerequisite for: DIA 6606

A lecture and laboratory course focusing upon the recognition, interpretation and reporting of normal and pathological changes revealed by radiography methods. The main areas of pathology include neoplastic, inflammatory, metabolic, arthritic, and traumatic changes in the tissues of the skeleton and articulations. Correlation with CT, MR and other specialized diagnostic-imaging methods is also introduced in this course.

RAD 6608 **30 hours, 2 credits**
Principles of Diagnostic Imaging
Prerequisite(s): None
Corequisite(s): RAD 6610
Prerequisite for: None

This lecture course addresses the principles of X-ray production and their effects. The radiation protection principle of issuing ionizing radiation "as little as reasonably achievable" (ALARA) is emphasized. The course concentrates on the best available techniques for achieving desirable radiographs with minimal radiation to the patient.

RAD 6610 **30 hours, 1 credit**
Radiographic Examination
Prerequisite(s): None
Corequisite(s): RAD 6608
Prerequisite for: None

A laboratory course in radiological positioning procedures. Emphasis will be placed upon preparing the student to obtain diagnostic quality conventional radiology of the spine and extremities. Proper operation

of radiographic equipment, patient positioning, as well as operator and patient radiation protection will be emphasized.

RAD 6705 **60 hours, 3 credits**
Advanced Imaging
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A didactic and laboratory course designed to introduce the student to advanced diagnostic procedures related to the practice of chiropractic. The course is divided into two sections: (1) Imaging Protocols and Advanced Imaging, focusing on spinal topics that include MRI, CT, Myelography, Nuclear medicine, SPECT, and PET; (2) Diagnostic Imaging of pathologic conditions of the abdomen and chest.

TCH 6101 **30 hours, 1 credit**
Chiropractic Technique I: Psychomotor Skills
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: TCH 6203

An introductory laboratory course in which the student begins to develop those psychomotor skills necessary for proper stance, palpation, speed, and dexterity necessary for delivery of the chiropractic adjustment. Biomechanics and specific psychomotor techniques as they relate to both the doctor and the patient are introduced and assessed.

TCH 6102 **30 hours, 1 credit**
Chiropractic Technique II: Introduction to Palpation
Prerequisite(s): None
Corequisite(s): ANA 6105
Prerequisite for: TCH 6203

Introduction to palpation is a laboratory course designed to introduce the student to the basics of palpation. The location and identification of the bony structures of the vertebral column, the pelvis, and the superficial musculature of the back and neck are emphasized. The concepts of layer palpation and postural evaluation are introduced. The student will also be introduced to topographical extremity palpation. The information received in this course will lay the foundation for all techniques the student of chiropractic will learn.

TCH 6203 **90 hours, 4 credits**
Chiropractic Technique III: Spinal Assessment and Introduction to Techniques
Prerequisite(s): ANA 6105, TCH 6101, TCH 6102
Corequisite(s): RAD 6203
Prerequisite for: TCH 6304, TCH 6305

A lecture and laboratory course that integrates spinal biomechanics, assessment and basic chiropractic adjusting skills. Emphasis is placed on static and motion palpation, developing tissue sense, psychomotor skills, and basic spinal and pelvic adjustive techniques. Contraindications to spinal adjustments and screening tests are discussed, demonstrated, and practiced.

TCH 6304 **90 hours, 4 credits**
Chiropractic Technique IV
Prerequisite(s): TCH 6203
Corequisite(s): None
Prerequisite for: TCH 6407

A lecture and laboratory course that focuses on chiropractic assessment and adjustment of the axial skeleton. Essential biomechanics and functional anatomy are reviewed and principles of adjustive techniques discussed. Patient assessment skills include history, range of motion, palpation, postural and gait analysis, and soft tissue considerations. Continued emphasis is placed on tissue sense, psychomotor skills, and basic spinal and pelvic adjustive techniques. Soft-tissue diagnosis and treatment is also introduced.

TCH 6305 **45 hours, 2 credits**
Extremities Technique I
Prerequisite(s): ANA 6204, TCH 6203
Corequisite(s): RAD 6304
Prerequisite for: TCH 6706, TCH 6406

A lecture and laboratory course focusing on the clinical anatomy, biomechanics, assessment, and treatment of the lower extremities. Emphasis will be placed on mechanical diagnosis, which will include history, range of motion, palpation, postural and gait analysis, and soft-tissue considerations. Tissue sense will be developed and delivery skills and adjustive techniques practiced.

TCH 6406 **45 hours, 2 credits**
Extremities Technique II
Prerequisite(s): TCH 6305
Corequisite(s): None
Prerequisite for: None

A lecture and laboratory course focusing on biomechanics, assessment, and treatment of the upper extremities. Emphasis will be placed on mechanical diagnosis which will include history, range of motion, palpation, postural and gait analysis and soft tissue considerations. Tissue sense will be developed and delivery skills and adjustive techniques practiced.

TCH 6407 **90 hours, 4 credits**
Chiropractic Technique V
Prerequisite(s): ANA 6204, TCH 6304
Corequisite(s): None
Prerequisite for: TCH 6508

A lecture and laboratory course that continues to emphasize chiropractic assessment and treatment skills. Focus is on the axial skeleton with an introduction of the appendicular skeleton and the closed kinematic chain. Essential biomechanics, functional anatomy, and adjustive technique principles are reviewed. Patient assessment skills include history, range of motion, palpation, postural and gait analysis, and soft tissue considerations. While emphasis continues on developing tissue sense, delivery skills, basic adjustive technique, and intermediate adjustive techniques are introduced and practiced. Mechanical diagnosis, management and treatment considerations for common neuromusculoskeletal conditions is introduced.

TCH 6501 **60 hours, 3 credits**
Soft Tissue Techniques
Prerequisite(s): None
Corequisite(s): TCH 6502
Prerequisite for: None

A core lecture and laboratory course that expands upon soft-tissue assessment and treatment. A variety of soft-tissue procedures are studied and practiced.

TCH 6502 **30 hours, 1 credit**
ConnecTX Therapy
Prerequisite(s): None
Corequisite(s): TCH 6501
Prerequisite for: TCH 6725

An introductory technique laboratory course that combines instrument-assisted connective tissue mobilization (IACTM) with a prescriptive exercise program to address connective tissue dysfunction. The technique utilizes the ConnecTX instrument, which is uniquely designed to adapt to the various tissue/shapes/curves of the body to examine and treat a variety of neuromusculoskeletal conditions. This course will cover the spine, thorax, abdomen, head, and neck. ConnecTX Therapy is a system of connective tissue assessment and treatment that allows the clinician to detect and treat soft tissue dysfunctions that produce pain, weakness, and functional limitations for the patient. The instrument is designed to provide an adjunct to a clinician's hands, and developing good palpation and manual skills is crucial to the success of this technique. Hands-on application with development of good anatomy palpation skills and manual skills using the instrument will be stressed as part of an overall rehabilitative program.

TCH 6508 **90 hours, 4 credits**
Chiropractic Technique VI
Prerequisite(s): TCH 6407
Corequisite(s): None
Prerequisite for: TCH 6604

A lecture and laboratory course with continuing emphasis on chiropractic assessment and treatment skills. Focus is on the axial skeleton, particularly the cervical spine, with appendicular skeleton correlation.

Essential biomechanics, functional anatomy, and adjustive technique principles are reviewed. Emphasis continues on developing tissue sense, delivery skills, and basic and intermediate adjustive techniques; in addition advanced adjustive techniques are introduced and practiced. Diagnosis and practical management considerations for common neuromusculoskeletal conditions related to the cervical spine are discussed. The relative efficacy and safety of commonly used clinical treatments for various cervical spine disorders is discussed in detail. Students are introduced to clinical reasoning skills that will assist in identifying contraindications for conservative management of spine-related conditions.

TCH 6604 **60 hours, 3 credits**
Flexion Distraction Technique
Prerequisite(s): DIA 6403, TCH 6508
Corequisite(s): ATP 6603, ATP 6604
Prerequisite for: TCH 6708

A technique lecture and lab course that covers the epidemiology, biomechanics, diagnosis, treatment, and management of conditions affecting the lumbar and cervical spine. Strong emphasis will be placed on assessment and treatment utilizing flexion distraction.

TCH 6605 **60 hours, 3 credits**
Evidenced Based Clinical Case Management
Prerequisite(s): None
Corequisite(s): ATP 6603, ATP 6604, DIA 6605
Prerequisite for: TCH 6708

This is an integrative course that covers the management of conditions common to chiropractic practice. The course will utilize "best practice" guidelines based on current literature. This course will cover assessment of patient conditions/diagnosis. It will cover treatment plans, which include frequency and duration of care, outcome assessment tools, reassessment, chiropractic technique(s), soft tissue manipulation, modalities, and special testing. Treatment plans will include appropriate imaging algorithms and referral algorithms. These treatment plans review current studies which evaluate treatment methods.

TCH 6706 **60 hours, 3 credits**
Diagnosis and Management of Extremities Conditions
Prerequisite(s): ATP 6604, DIA 6403, TCH 6305
Corequisite(s): None
Prerequisite for: None

An integrative diagnosis and technique lecture and laboratory course that emphasizes the assessment, treatment and management of extraspinal disorders.

TCH 6708 **30 hours, 1 credit**
Contemporary Concepts in Chiropractic
Prerequisite(s): TCH 6604, TCH 6605
Corequisite(s): None
Prerequisite for: None

This core laboratory course will focus on allowing students to continue to review, practice, and refine previously studied techniques, as well as on presenting an alternative model of the subluxation (or chiropractic manipulate lesion) in the application of some of those techniques.

ELECTIVE COURSE DESCRIPTIONS

The elective program is designed to be dynamic and responsive to changes within chiropractic education and healthcare. The scope and frequency of elective course offerings are dependent upon student interest and faculty expertise and availability.

ANA 6504 **15 hours, 1 credit**
Craniofacial Biology
Prerequisite(s): Completion of the core basic sciences through fourth trimester
Corequisite(s): None
Prerequisite for: None

This lecture course will review the basics of craniofacial growth and lay the foundations to understand common craniofacial malformations such as cleft lip and palate, craniosynostoses, and pharyngeal arch syndromes. Furthermore, growth and dysfunction of the temporomandibular (TMJ) joint and the inner ear will be explored. Chiropractic faculty will present three lectures, and they will discuss diagnosis and treatment aspects of craniofacial problems and cranial adjusting techniques.

ANA 6505 **15 hours, 1 credit**
Forensic Osteology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will provide an overview of the skeletal features that can be used to help identify victims of accidents and crimes in forensic cases when identification is not possible by other means. These methods include estimating age at death, sex, ethnic background, stature, and even facial features. This information is critical for those interested in working with or as coroners and other law enforcement officials.

ANA 6514 **15 hours, 1 credit**
Advanced Arthrology and Bone Mechanics
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is an advanced discussion of the joints of the human body and the mechanical properties of the tissues of the skeleton: bone, cartilage, tendons, and ligaments. The primary emphasis of the course will be the synovial joints of the axial and appendicular skeleton and the solid joints of the vertebral column (discs and ligaments). The course will be in a lecture format, with laboratory presentation of relevant prosected materials.

ANA 6520 **15 hours, 1 credit**
Mechanics and Pathomechanics in Craniofacial Complex
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course will review the biomechanics of skeletal muscle and cartilage. The process of mastication, vocalization, and deglutition will be defined. Normal muscle function will be discussed (mechanics), followed by abnormal muscle function (pathomechanics) so that students can appreciate how pathomechanics interferes with the normal process of mastication, vocalization, and deglutition.

ANA 6522 **15 hours, 1 credit**
Mechanics and Pathomechanics of the Pelvis and Lower Extremity
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course present functional anatomy (a discussion based upon kinesiology and moment arms) of the pelvis and lower extremity. Normal mechanics will be described for the pelvis and lower extremity within the context of the pelvic floor dysfunction, hip, knee, ankle, and foot. After normal mechanics are discussed, pathomechanics are examined for each ROM at a joint. Specific reference will be made to what happens at that joint when a particular muscle is weak or tight. The course will end with a discussion of the gait cycle and how it is altered by the pathomechanics presented earlier in the course.

ANA 6606 **45 hours, 3 credits**
Clinical Anatomy
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is a review of gross anatomy coupled with clinical exposition on applied anatomical topics. The gross anatomy review will be coupled with various clinical conditions students are likely to encounter in their practice. The lecture portion will concentrate on describing common musculoskeletal conditions. The laboratory aspect will identify anatomical structures.

AST 6520 **15 hours, 1 credit**
Doctors as Teachers
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course takes future chiropractic practitioners outside of the treatment room to bring educational opportunities to the broader community in which they wish to reside and/or practice. These educational experiences allow practitioners to reach out to their community to educate and motivate residents on general health and wellness or specific public health issues based on an analysis of community needs.

AST 6550 **30 hours, 2 credits**
Women's Healthcare Issues
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to allow students to gain an understanding of the aspects of human biology and healthcare that are uniquely female. The course material will include information on the role of healthcare in a woman's life. Topics such as research funding for women's health issues will be discussed. Basic information on female anatomy and physiology will be studied; however, the focus will be on issues of medicine and science relating to women. Major diseases that affect women – such as cardiovascular disease, osteoporosis, lung and breast cancer – will be studied. The role of scientific research and patient education will be explored. In addition, major diseases that are associated with each system of the body and most commonly occur in women will be studied. Issues surrounding the female sexual response, pregnancy and infertility will be explored. Mental health issues will also be studied.

AST 6556 **30 hours, 2 credits**
Preparation as a College Educator
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This interactive course will explore the elements of how to prepare and deliver courses at the college level. The content will include adult education theories, current educational research, and course design. Class discussion and projects will include practical and theoretical aspects of course design including: learning objectives and syllabus design; decisions in course content, preparation, and delivery; assessment design, analysis and grading; and issues of instructional inclusiveness.

AST 6569 **15 hours, 1 credit**
Peer Mentor Training
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A 1 credit blended course designed to provide the necessary training for a student becoming an Academic Peer Mentor. To enroll in this course, the student must be a member of or be eligible for admission into the Phi Chi Omega Honor Society. The training will provide the knowledge and skills needed to support the Academic Advisement process in a professional, ethical manner.

AST 6570 **15 hours, 1 credit**
Advanced Lower Extremity Movement Analysis & the Use of Orthoses
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

An active learning lecture course that discusses conditions and movement patterns, as well as the uses and benefits of orthosis used to support, align, and prevent deformities or to improve function. Emphasis will be on the articulations of the lower extremity and the effect on the pelvis and spine. Course formats will include lectures, active analysis of movement patterns, casting and scanning techniques for orthotics, comparisons between various types of orthopedic devices, and demonstrations of proper usage. Both long and short term conditions will be considered.

AST 6572 **15 hours, 1 credit**
Instrumented Biomechanics and Gait Analysis
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

An engaging student-centered, hands-on course that details methods used in the investigation of movement pathology using commercially available tools to capture and analyze kinematic and kinetic parameters of human motion. Emphasis will be placed on the capture and analysis of normal and pathological gait, instrumented postural analysis, and reaching tasks. Specific student achievement goals include understanding the underlying principles of several motion-capture and force-capture techniques and the appropriate application of each technique. Students will then go on to learn general principles and methods for quantification, analysis, interpretation, and classification of movement pathology.

AST 6605 **45 hours, 3 credits**
The Basics of Whole Food Nutrition
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: AST 6715

This is a lecture course focusing on the fundamentals of whole food nutrition and supplementation for various health conditions and overall optimal well-being. Special attention will be paid to implementing whole food nutrition in the health and regulation of all organ systems in the human body, including a review of major biochemical and physiological mechanisms. In addition, the students will also gain an understanding of the symptom survey, nutritional examinations and basic implementation of whole food nutrition into a healthcare practice.

AST 6610 **15 hours, 1 credit**
Pregnancy & Pediatric Nutrition
Prerequisite(s): AST 6504
Corequisite(s): None
Prerequisite for: None

This online course will focus on specific nutrition for the pregnant patient, nursing patient, infant and children adolescents. Topics to be discussed include: fertility and nutritional considerations with the female reproductive system, healthy food and supplemental options for a pregnant patient, healthy food and supplemental options for children and adolescents and common infant, child, and adolescent nutritional considerations for disease states.

AST 6715 **30 hours, 2 credits**
Nutritional Trends and the Impact on Diet & Disease
Prerequisite(s): AST 6504, AST 6605. Students must be approved by the lead instructor and Program Dean to participate in the course.
Corequisite(s): None
Prerequisite for: None

This blended course will focus on current nutritional trends and how these trends impact diet and disease. Through discussion of controversial topics and application of current nutritional research, this course will allow students the opportunity to advance their knowledge and application of nutrition within the clinical setting. Topics will include history of dietary guidelines, organic versus non-organic foods, farming trends, GMO regulations, quality of supplements, sugar and obesity, and food addictions. Students will attend a weekend nutritional seminar at Standard Process, Inc. in Palmyra, Wisconsin, to further learn and implement various nutritional concepts and practices.

CLS 6720 **45 hours, 2 credits**
Integrative Chiropractic Geriatrics
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Course work is designed to train our future chiropractic workforce in the nuances associated with geriatric patient care, including aspects of providing care in an integrative healthcare system. This course exposes the student to the field of geriatrics through course work that will include

a. lecture format,

b. reading assignments in the form of textbook readings as well as journal articles, and

c. writing assignments designed to enhance your research skills.

CLS 6805 **30 hours, 1 credit**
Hospital-Based Multidisciplinary Grand Rounds
Prerequisite(s): Trimester 8 and above
Corequisite(s): None
Prerequisite for: None

In this practical observational course, students will learn the role of the chiropractor in a multidisciplinary hospital-based setting. This five-day immersive experience will include rotations with various disciplines within a hospital system with an integrated chiropractic department. The week will consist of four to six rotations within the fields of Chiropractic, Orthopedics, Neurodiagnostic, Sports Medicine, Physical Therapy, Pain Management, Podiatry, and Neurosurgery. Students will spend time in these offices, rounding with clinicians from various disciplines, and attend at least one procedure (injections, EMG/NCV studies, surgeries, etc.) during this course.

DIA 6510 **22.5 hours, 1 credit**
McKenzie Method® of Mechanical Diagnosis and Therapy® - Part A – Lumbar Spine
Prerequisite(s): Trimester 5 or above
Corequisite(s): None
Prerequisite for: None

McKenzie Method® of Mechanical Diagnosis and Therapy® (MDT) is a unique, dynamic and comprehensive system of assessment, classification, treatment and prevention of musculoskeletal disorders. Its framework allows one to screen, categorize and apply tailored treatment and a preventative program for each patient. The Part A course focuses on the application of the MDT for the Lumbar Spine. The goals of this course are to gain knowledge and skills that form the basis from which one begins to develop their abilities in applying these principles.

DIA 6537 **15 hours, 1 credit**
Clinical Pediatric Chiropractic Care
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture and discussion course – with some laboratory time – that presents concerns and problems affecting the pediatric population. The areas in which chiropractic can intervene will be thoroughly discussed, utilizing academic and clinical knowledge and examples. Topics covered will include, but are not limited to, anatomy and physiology of the neonate and young child, radiological considerations of the child, diagnostic laboratory tests and findings, and chiropractic techniques designed to deliver a safe chiropractic adjustment. Topics will be integrated in a case study format for half of the course. Students will gain a greater appreciation of pediatric diagnostic ability and corrective care.

DIA 6540 **15 hours, 1 credit**
Chiropractic Management of the Pregnant Patient
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to provide the student with the knowledge required to assess the pregnant patient and to provide safe and appropriate chiropractic care for the pregnant and postpartum patient. Students will be taught to distinguish between red flags and common musculoskeletal complaints unique or common to the pregnant patient. Students will be taught appropriate modifications that should be made to the chiropractic manipulative therapies taught in the curriculum when treating the pregnant patient. The course will also seek to educate the student of the biomechanical changes that occur in the spine throughout pregnancy, how these changes can manifest as physical complaints, and the appropriate chiropractic care to address these complaints.

DIA 6564 **30 hours, 2 credits**
Survey of Complementary and Alternative Medicine Therapies
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This is an online survey course designed to introduce students to complementary and alternative therapeutic approaches to healthcare. Major systems of healing will be addressed such as Traditional Chinese Medicine, Naturopathy, Homeopathy, Botanical medicine (East, West, Native American), and Tibetan medicine. Other systems of therapeutics such as somatic therapies, nutritional approaches to disease management, spiritual practices, hypnosis, and meditation will also be introduced.

DIA 6567 **15 hours, 1 credit**
Tunnel Syndromes Diagnosis and Management
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

An online lecture course designed to provide a comprehensive overview regarding the identification and treatment options for canal and tunnel syndromes and other neural and neurovascular entrapment syndromes. The course will provide examples of conditions from a clinical perspective, with emphasis on identifying causes and preventative strategies, chiropractic management and other approaches to management. Discussion of conditions will consist of topics ranging from anatomy, functional neurology, ergonomics and biomechanics, and some physiology. Examination strategies will include history taking, typical and special physical, neurological and orthopedic examination procedures, radiographic and special imaging studies, and some laboratory testing procedures. Management options include chiropractic adjusting and manipulative therapy, soft tissue treatments, ancillary treatments, physical therapy including strengthening and stretching, splints and supportive devices, and several medically oriented approaches. Additional discussion includes options for co-management of surgical and cases involving medical intervention.

DIA 6569 **30 hours, 2 credits**
Ergonomics
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

An online course in which the student will learn to evaluate an environment and how that environment (typically a work environment) will impact a given person. Students will develop the ability to analyze a specific environment, evaluate required tasks of a given job description, and examine an employee for the purpose of developing a safety and/or prevention program. Classes will include lectures and practical exercises, with emphasis on integrating previously accumulated knowledge and skills with those developed in the course.

DIA 6615 **22.5 hours, 1 credit**
McKenzie Method® of Mechanical Diagnosis and Therapy® - Part B – Cervical & Thoracic Spine
Prerequisite(s): Successful completion of McKenzie Method® of Mechanical Diagnosis and Therapy® - Part A – Lumbar Spine
Corequisite(s): None
Prerequisite for: None

McKenzie Method® of Mechanical Diagnosis and Therapy® (MDT) is a unique, dynamic and comprehensive system of assessment, classification, treatment and prevention of musculoskeletal disorders. Its framework allows one to screen, categorize and apply tailored treatment and a preventative program for each patient. The Part B course focuses on the application of the MDT for the Cervical & Thoracic Spine. The goals of this course are to gain knowledge and skills that form the basis from which one begins to develop their abilities in applying these principles.

DIA 6653 **15 hours, 1 credit**
Advanced Clinical Neurology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture intended to improve the level of knowledge and diagnostic skills of the chiropractic student with respect to chiropractic applications of treatment, treatment protocols complementary to the spinal adjustment, nuances in examination procedures, and mechanisms of neurological activity. This will be accomplished by focusing on specific clinical topics and patient presentations, reviewing appropriate anatomy and neural mechanisms, and discussion of treatment protocols.

DIA 6657 **15 hours, 1 credit**
Concussion and Head Trauma in the Athlete
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Issues surrounding concussions are increasing as our knowledge base grows. Concussions can result from athletic injuries, motor vehicle accidents, or general injuries. This course presents the most current information and best practices relating to concussions and complications involved in head injuries with an emphasis on the athlete. The current neurological and neuropsychological assessments available to diagnose

concussions are presented along with current treatment and management protocols. While concussion management is not specifically under the scope of chiropractic care, recognition, and diagnostic indicators of any significant health condition, including concussion, are a standard of care in chiropractic practice in every state in the United States. Doctors of chiropractic are expected to recognize the signs and symptoms of concussion and head trauma as they would be expected to recognize a potential fracture, dislocation, or any serious underlying pathologies presenting as neuromusculoskeletal complaints. This course will prepare the student to work in any health care setting, including sporting events, and be able to evaluate, tentatively diagnose, and refer appropriately any patient or athlete who has sustained a concussion or traumatic brain injury.

DIR 7000 **15-120 hours, 1-8 credits**
Directed Study
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Topic and credit hours to be mutually arranged between a representative of the College and the student. The course provides additional opportunities for students outside the traditional lecture and lab settings. Educational and learning objectives will be jointly established between the student and the College. This course allows for participation in research, development of publishable works, independent studies, off-campus educational experiences, or other mutually agreed-upon studies. Directed study can be taken during any trimester in which electives are offered. Directed study may be performed either on campus or during an off-campus experience, such as concurrent with an externship. This course may be taken more than once to accommodate long-term projects or varied interests.

RAD 6620 **15 hours, 1 credit**
Introduction to Neuroradiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course exploring the imaging characteristics of common neurologic disorders of the central nervous system with an emphasis on the spinal cord. This course will present an overview of imaging indications, traumatic and vascular conditions neoplasms demyelinating conditions, congenital disorders and neurocutaneous syndromes of the spinal cord and brain. Students will gain a greater understanding of the use of magnetic resonance imaging and computerized tomographic imaging techniques as it relates to the evaluation of neurological disorders seen in a chiropractic practice.

RAD 6621 **15 hours, 1 credit**
Advanced Cases in Chiropractic Imaging
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course exploring the imaging characteristics of complex and unusual cases affecting the chiropractic patient population. This course will focus on the identification of imaging patterns and management of uncommon musculoskeletal and visceral pathologies including traumatic, neoplastic, metabolic, arthritic, dysplastic, infectious, and vascular conditions diagnosed in chiropractic patients. Students will gain a greater understanding of abnormal imaging pat-terns and will develop the skills required to manage difficult and unusual diagnostic imaging cases.

RAD 6622 **15 hours, 1 credit**
Pediatric Radiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

A lecture course exploring the imaging characteristics of normal skeletal development and radiographic patterns of common musculoskeletal pathologies affecting the pediatric population. This course will focus on imaging indications, traumatic conditions, neoplasms, metabolic disorders, scoliosis, and heavy metal toxicity occurring in young patients. The course will also address the clinical and imaging indications for specialty referrals Students will gain a greater understanding for the normal radiographic appearance of the immature skeleton and will develop the skills required to detect abnormal imaging manifestations.

TCH 6525 **30 hours, 2 credits**
Introduction to Sports Injury Management
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

The purpose of this course is to provide an introductory overview to sports medicine for the chiropractic student.

Skill development will include on-field clinical decision making, first aid for sports injuries, taping and wrapping procedures, and rehabilitation/performance enhancement treatment planning. These skills will be integrated into the prevention, diagnosis, immediate management, and rehabilitation of commonly encountered injuries to include the spectrum of life-threatening to non-traumatic overuse conditions. The student will prepare to work as a member of the sports medicine team. Administrative and risk management aspects related to sports medicine/chiropractic will be reviewed.

TCH 6540 **60 hours, 2 credits**
Activator Methods
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

Activator Methods will expose students to Activator Methods Chiropractic Technique. Both the assessment methods and the use of the Activator instrument will be learned. The course will cover both the Basic Scan and the advanced techniques used to address specific chief complaints associated with the spine and the extremities commonly treated in clinical chiropractic practice.

TCH 6551 **15 hours, 1 credit**
Introduction to Applied Kinesiology
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This is a survey course designed to provide an overview of the principles of Applied Kinesiology. Applied Kinesiology is a diagnostic system that uses the neuromusculoskeletal system to augment normal examination procedures. An Applied Kinesiology examination depends upon knowledge of functional neurology, anatomy, physiology, biomechanics, and biochemistry and is combined with standard physical, neurological and orthopedic examination procedures, laboratory findings, X-rays, and history taking.

TCH 6559 **45 hours, 2 credits**
Nimmo® I
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: TCH 6655

The course will provide a comprehensive understanding of this soft tissue technique. Students will become familiar with the neurophysiology on which it was based. Participants will become skilled practitioners of this precise pressure point technique. The technique will be demonstrated in small increments and students will practice on each other under close supervision as they acquire the complex psychomotor skills necessary to locate and eliminate myofascial trigger points in all areas of the body.

TCH 6560 **15 hours, 1 credit**
Sacro Occipital Technique I
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: TCH 6660

The student enters this course on the basis that they wish to become extremely proficient in the use of Sacro Occipital Technique. Basic principles of the SOT procedure are covered in detail. This is a practical course. The student will be able to practice the application of this procedure proficiently.

TCH 6562 **15 hours, 1 credit**
Introduction to Gonstead Methods
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

The Gonstead elective course is designed to introduce the students to the chiropractic philosophy and methods developed and utilized by Dr. Clarence Gonstead. The elective will introduce the student to the following assessment skills utilized in the Gonstead Method: use of motion palpation, static palpation, radiographic structural analysis, and the instrumentation to better identify the spinal subluxation will be emphasized. The course will instruct the student to properly set up the adjustments using the specific adjustive techniques developed by Dr. Gonstead, using the pelvic bench, the knee chest table, and the cervical chair. It will also aid the student in understanding the Gonstead listing system by providing more depth and clarity. This additional learning experience is offered to enhance their treatment and decision making skills in order to provide better clinical treatment to their patients.

TCH 6625 **30 hours, 1 credit**
Clinical Palpation & Soft Tissue Assessments
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This is a one (1) credit course designed to advance student palpation and assessment skills as they relate to soft tissue structures and function. Students will review palpation techniques used on previously introduced structures and expand into others as they relate to the course texts. They will be offered opportunities to critically evaluate muscle imbalances as they as they are offered in the course texts and other areas of consideration. Emphasis will be given to location, assessment, and arrangement of muscle groups and systems, also incorporating tensegrity models, based on Myer's muscle trains. Considerations for assessment will include synergist/ antagonist relationships and will pool from commonly used techniques such as Functional Movement Screen (FMS), Selective Functional Movement Assessment (SFMA), and Neurokinetic Therapy (NKT).

TCH 6635 **30 hours, 1 credit**
Sports Injury Management II
Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is designed to further prepare students for working with athletes in and out of a traditional clinic setting. Topics will cover advanced taping and bracing, adaptive chiropractic techniques, current research topics in sports, and the importance of effective communication as part of a sports medicine team.

TCH 6655 **45 hours, 2 credits**
Nimmo® II
Prerequisite(s): TCH 6559
Corequisite(s): None
Prerequisite for: None

The course will provide an opportunity for students to refine and enhance the skills they acquired in Nimmo® I. The neurophysiological concepts presented in the introductory course will be explored in greater depth. The major muscles covered in the introductory course will be reviewed. Emphasis will shift to the location and elimination of myofascial trigger points as they occur in all muscles of the extremities and TMJ. The advanced course will unfold in a manner similar to that used in Nimmo® I. The technique will be demonstrated in small increments and students will practice on one another under close, expert supervision. Detailed case studies will be presented from the instructor's extensive patient base of professional athletes, dancers, and musicians. Case studies of patient complaints encountered by students will also be addressed in addition to developing a Nimmo® treatment plan.

TCH 6660 **15 hours, 1 credit**
Sacro Occipital Technique II
Prerequisite(s): TCH 6560
Corequisite(s): None
Prerequisite for: None

An overview of the Category system of diagnostic indicators as developed by Dr. M.B. DeJarnette is presented. The diagnosis and treatment of Category 1, with its related distortions of the dura, and Category 3, the disc related category, are presented in detail. This is a hands on course designed to increase the students proficiency of osseous and soft tissue distortion correction.

TCH 6725 **30 hours, 1 credit**
ConnecTX Therapy–Upper and Lower Quadrants
Prerequisite(s): TCH 6502
Corequisite(s): None
Prerequisite for: None

ConnecTX Therapy utilizes a specialized instrument along with a prescriptive exercise program to assist the chiropractor in the detection and treatment of a variety of connective tissue (CT) disorders. This elective is designed to build on the knowledge and skills attained in TCH 6502 and apply them to the diagnosis. ConnecTX Therapy treatment and case management of conditions affecting the lower and upper quadrants, ConnecTX instrument grips, holds, slant positions, directional use, treatment maneuvers, and hygiene will be reviewed in the context of the lower and upper quadrants. Functional anatomy accuracy and precision will be stressed throughout the course. Indications, contraindications, diagnosis, pre- and post-treatment practices, rehabilitation, and case management will also be discussed and practiced.

TCH 6805 **15 hours, 1 credit**

Sports & Human Performance

Prerequisite(s): None
Corequisite(s): None
Prerequisite for: None

This course is to assist students wishing to pursue a career in the field of sports chiropractic and acts as a bridge course to the CCSP. In this course the students will further develop the appropriate clinical knowledge and communication skills related to treating the athletic population and the correlation to practice.

REQUIREMENTS FOR GRADUATION

In order to be eligible for graduation from the D.C. program, candidates must meet the following criteria:

1. successful completion of a minimum of four academic years of study at an accredited institution granting a first professional degree, of which the last four trimesters must have been in residence at Northeast College of Health Sciences;

2. successful completion of all required course work with a cumulative Grade Point Average of 2.00 or higher;

3. completion of a seminar in the identification and reporting of child abuse in accordance with standards specified by the New York State Education Department;

4. successful completion of all clinical clerkship requirements at the College's outpatient health centers;

5. satisfactory completion of Outcome Assessment requirements;

6. timely application for the Doctor of Chiropractic degree;

7. fulfillment of all financial obligations to the College; and

8. completion of the above requirements within seven calendar years following the date of original matriculation.

It is solely the responsibility of the degree candidate to comply with all requirements for the degree. The institution's effort to monitor student progress toward graduation does not relieve the individual of primary responsibility in this matter.

EDUCATIONAL REQUIREMENTS FOR LICENSURE

Requirements for Licensure – United States

Pursuant to federal regulations 34 CFR § 668.14 and § 668.43, and the requirements of the National Council for State Authorization Reciprocity Agreements (NC SARA), Northeast College of Health Sciences (Northeast) must provide students with up-to-date information regarding whether its licensed profession programs meet state and territory standards allowing graduates to qualify for professional licensure. This information can be found on the College's website under "Consumer Information" in the Licensure Information accordion at the following web address: https://www.northeastcollege.edu/consumer-information

Preprofessional Requirements for Licensure

Several state chiropractic boards have preprofessional licensure requirements that are not included in Northeast's minimum entrance requirement, such as a bachelor's degree prior to chiropractic study. It is the applicant's responsibility to ascertain and comply with the licensure requirements for any state in which licensure is desired. This information must be sought directly from state boards of chiropractic to ensure accuracy.

Applicants who desire detailed information relative to licensure in a particular state should contact that state's board (individual state board addresses are available in the Center for Student Support), or the Federation of Chiropractic Licensing Boards (5401 W. 10th Street, Suite 101, Greeley, Colo. 80634).

Requirements for Licensure – Foreign Jurisdictions

Many foreign countries now have chiropractic licensure laws. Applicants or students who have interest in this area are advised to contact the chiropractic authorities of the country in which they wish to practice.

The National Board of Chiropractic Examiners

The National Board of Chiropractic Examiners was incorporated on June 19, 1963, for the purpose of conducting a chiropractic examination program at the national level as a service to the state boards of examiners, to the chiropractic colleges and their students, and to the graduate chiropractor.

Master of Science in Applied Clinical Nutrition

The Master of Science degree in Applied Clinical Nutrition is an online program.

Purpose Statement

The Master of Science in Applied Clinical Nutrition degree program advances the Mission and Values of Northeast College of Health Sciences through its preparation of clinical nutrition professionals. The program places emphasis on the principles of quality patient-centered care through the analysis of evidence and utilization of the highest standards in nutritional assessment, intervention, promotion of health, and case management focusing on the use of whole foods and therapeutic plants in an integrative approach to optimal wellness.

Program Goals

1. To provide a high quality educational experience centered on the important relationship that exists between nutrition and health.

2. To provide an education centered on an understanding of the biochemical aspects of metabolism and the interrelationship between macro and micro nutrients.

3. To prepare graduates to clinically assess individuals for nutritional imbalances and apply evidence-based therapeutic interventions.

4. To concentrate on a whole foods approach to nutritional therapeutics and its role in optimal health and wellness.

5. To prepare health care professionals to recommend nutritional and herbal supplementation, when appropriate, based on scientific and clinical evidence.

6. To develop critical appraisers of the healthcare literature and the nutrition industry.

7. To educate graduates to interact professionally and ethically within an integrative healthcare environment.

Program Learning Outcomes

Our graduates will be able to

1. summarize and interpret the theories, definitions, biochemical and physiological pathways, and interactions pertaining to clinical nutrition;

2. observe and analyze common eating patterns and relate the importance of early intervention in the prevention of disease and maintenance of health;

3. assess nutritional needs of individuals, establish nutritional priorities, and apply an individualized evidence-based therapeutic intervention;

4. integrate individualized lifestyle modifications in nutritional protocols and overall health;

5. describe and defend the fundamental elements of research design and evaluate empirical literature for quality and applicability;

6. utilize effective written and verbal skills to communicate the principles of nutrition and their role in health and wellness;

7. evaluate the role of demographics, ethical decisions, and community influences in nutritional needs, choices, attitudes and behaviors; and

8. demonstrate ethical reasoning and professional behavior applicable to nutrition practice within an integrative healthcare environment.

Admission to the Program

The field of Applied Clinical Nutrition draws students of all ages and from all walks of life who share an interest in a holistic approach to healthcare. In assessing applicants, Northeast looks for individuals who demonstrate the potential to succeed in Northeast's rigorous master's degree program in Applied Clinical

Nutrition, as well as a commitment to helping people through a healing profession. Successful candidates exhibit strong communication skills, integrity, and professionalism.

Admission Process and Guidelines

Northeast offers rolling admissions. Applications are accepted until all of the available seats have been filled.

To be certain that students have enough time to complete all steps in the application process, and to have adequate time for appropriate financial aid planning to begin classes when desired, application to Northeast should begin three to six months in advance of the intended start date.

Characteristics of a successful candidate for admission include:

- superior communication skills, both oral and written;
- a good understanding of the nature of the student's intended profession as distinguished from other healing arts;
- evidence of strong motivation to become a healthcare practitioner;
- initiative and honesty, as evidenced by the candidate's transactions within the application process and in all information submitted in support of the application; and
- academic achievement that compares favorably to that of successful students at Northeast.

Northeast only accepts applications online.

Online application:www.northeastcollege.edu/apply. A non-refundable $60 application fee is required at the time of submission. Applications will not be processed until received.

A fee waiver code can be obtained by sending an unofficial transcript to the Admissions office for evaluation prior to submission of the online application.

A one to two page personal statement providing a brief, personal profile of the applicant, including philosophy as a healthcare provider and motivations for applying to Northeast is required.

Eligible applicants will complete a virtual admissions interview with a Northeast faculty member. This interview assesses the candidate's motivational characteristics and personality strengths.

After the applicant has satisfied admission requirements by supplying documentation and completing a faculty interview, the prospective student's complete application package will be reviewed by the Admissions Committee. Upon completion of the review, the applicant will be notified of the College's admission decision. Notification specifying the entering class term is provided to all accepted applicants. Prospective students must have official transcripts from ALL colleges or universities they have attended sent directly to the Northeast Admissions office. For transcripts received from institutions under academic probation by their regional accrediting organization, credit received for coursework completed while the institution was accredited will be accepted. An official acceptance occurs only after the selected candidate has supplied official transcripts and other documents as required.

Applicants notified of acceptance or invited to continue their candidacy are expected to complete a decision reply form and deposit to indicate their enrollment intentions. Those accepting an offer of admission must make a non-refundable deposit of $400 within 30 days following notification to secure a seat in the desired class. The deposit will be applied toward the first trimester's tuition and fees. The Admissions office may adjust the non-refundable deposit amount depending on the application date in relation to the trimester start date.

Submission of fraudulent documents, misrepresentation, or deliberate omission of any relevant information in the application process shall be sufficient cause for rejection of the candidate prior to admission, revocation of admission, and dismissal if admitted as a student.

Applications and supplemental documents received will remain active for 12 months from date of submission, at which time they will be deleted.

Notice of Nondiscrimination

Northeast College of Health Sciences admits students of any race, color, religion, disability, national origin, sexual orientation, gender identity or expression, military status, sex, age or marital status to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, religion, disability, national origin, sexual orientation, gender

identity or expression, military status, sex, age or marital status in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

Application Deferral

Applicants for a particular term may defer their admission to a subsequent term, with the approval of the Admissions office and based on the availability of space. If space is no longer available for the trimester requested on the application, the applicant will be contacted by the Admissions office and considered for the next available trimester. As a courtesy to other applicants, an accepted candidate who ultimately does not plan to enroll at Northeast is requested to notify the Admissions office of this fact so another student can be admitted in this slot.

Information Sessions

You are invited to attend our virtual or on-campus program events to check out our classrooms, labs, and innovative learning spaces as well as meet our expert faculty and dedicated students.

For further information on registering for an information session, visit https://www.northeastcollege.edu/admissions/open-house.

You are invited to visit the Northeast campus in a variety of formats:

- online virtual tour at https://www.youvisit.com/tour/northeastcollege,
- live virtual tour with a tour guide using FaceTime, Duo or Skype,
- on-campus tour with a tour guide.

For further information on visiting Northeast or to schedule an appointment, contact the Admissions office at 800.234.6922.

Academic Requirements for Admission

Applicants are required to show proof of successfully completing 90 semester hours (136 quarter hours) of college credit, including nine credits of bioscience course work prior to matriculation, from an accredited, degree-granting institution. Students must have achieved a grade of "C" or better in the prerequisite bioscience course(s). A cumulative Grade Point Average (GPA) of 2.5 or higher on a 4.0 scale is desired for pre-professional college study.

Transfer Applicants

To be considered for transfer credit,

- course work to be transferred must have been completed within five years of the transfer date;
- a course must be equivalent in content and credit hours to the Northeast course for which credit is sought;
- the student must have earned a grade of C or higher, and not have used the course to meet entrance requirements;
- courses must have been taken at the professional or graduate level; and
- applicants must obtain and complete an application for transfer credit and wait for an evaluation.

An offer of transfer credit, if accepted by the candidate, is not subject to further negotiation after transfer to Northeast.

In consultation with appropriate department heads and faculty, the appropriate academic Dean or Director may grant transfer credit under exceptional or unusual circumstances that vary from the parameters defined above. Under no circumstances will credit be given for life experience.

Under no circumstances can more than 50% of credits be accepted for transfer.

International Applicants

Northeast welcomes applications from international candidates. Applicants who are not U.S. citizens must meet the same entrance requirements as U.S. citizens. International candidates must complete the same application procedures as all others, and must additionally provide the following:

1. evidence of the ability to read, write, and speak English at a level of mastery sufficient to

successfully complete the course of study for the graduate program in Applied Clinical Nutrition;

2. a comprehensive evaluation of educational credentials by an appropriate agency such as World Education Services (WES), International Education Resource Foundation (IERF), SpanTrans, Academic Evaluation Services (AES), and Educational Credential Evaluators (ECE), etc.; and

3. certified English translation of educational credentials.

SAMPLE CURRICULUM SCHEDULE

MASTER OF SCIENCE IN APPLIED CLINICAL NUTRITION
24-MONTH PROGRAM

The curriculum leading to the Master of Science degree in Applied Clinical Nutrition requires six trimesters (each of 15 weeks' duration) of part-time online study. This is the equivalent of 24 calendar months. Students are expected to follow the curriculum sequence unless permission to register for a course out of sequence is granted by the program Director.

Course No./Title	Credits
First Trimester	
NTR 5104 Biochemistry I: The Macronutrients	3
NTR 5106 Theories and Principles of Applied Clinical Nutrition & Whole Food Science	3
Total	**6**
Second Trimester	
NTR 5206 Biochemistry II: The Micronutrients	3
NTR 5207 Nutrition Across the Lifespan	3
Total	**6**
Third Trimester	
NTR 5305 Design, Analysis, and Critical Evaluation of Research	3
NTR 5306 Genomics and Personalized Nutrition	1
NTR 5307 Clinical Nutrition for Pain and Inflammation	2
Total	**6**
Fourth Trimester	
NTR 5406 Clinical Herbalism	3
NTR 5503 Nutritional Assessment	3
Total	**6**
Fifth Trimester	
NTR 5402 Drug Induced Nutrient Depletion & Herb/Drug Interaction	3
NTR 5504 The Microbiome and Gastrointestinal Health	1
Elective (see Elective Course Options below)	2
Total	**6**
Sixth Trimester	
NTR 5605 Medical Nutrition Therapy	2
Elective (see Elective Course Options below)	2
NTR 5610 Clinical Nutrition Capstone Project	2
Total	**6**
Total Required Credits	**36**

Elective Course Options (4 credits required):	
NTR 5405 Behavioral Nutrition	2
NTR 5604 Clinical Sports Nutrition	2
NTR 5607 Introduction to Clinical Practice	2

SAMPLE CURRICULUM SCHEDULE

MASTER OF SCIENCE IN APPLIED CLINICAL NUTRITION
16-MONTH PROGRAM

The curriculum leading to the Master of Science degree in Applied Clinical Nutrition requires four trimesters (each of 15 weeks' duration) of part-time online study. This is the equivalent of 16 calendar months. Students are expected to follow the curriculum sequence unless permission to register for a course out of sequence is granted by the program Director.

Course No./Title	Credits
First Trimester	
NTR 5104 Biochemistry I: The Macronutrients	3
NTR 5106 Theories and Principles of Applied Clinical Nutrition & Whole Food Science	3
NTR 5206 Biochemistry II: The Micronutrients	3
Total	**9**
Second Trimester	
NTR 5207 Nutrition Across the Lifespan	3
NTR 5306 Genomics and Personalized Nutrition	1
NTR 5307 Clinical Nutrition for Pain and Inflammation	2
NTR 5503 Nutrition Assessment	3
Total	**9**
Third Trimester	
NTR 5305 Design, Analysis, and Critical Evaluation of Research	3
NTR 5406 Clinical Herbalism	3
NTR 5504 The Microbiome and Gastrointestinal Health	1
Elective (see Elective Course Options below)	2
Total	**9**
Fourth Trimester	
NTR 5402 Drug Induced Nutrient Depletion & Herb/Drug Interaction	3
NTR 5605 Medical Nutrition Therapy	2
Elective (see Elective Course Options below)	2
NTR 5610 Clinical Nutrition Capstone Project	2
Total	**9**
Total Required Credits	**36**

Elective Course Options (4 credits required):

NTR 5405 Behavioral Nutrition	2
NTR 5604 Clinical Sports Nutrition	2
NTR 5607 Introduction to Clinical Practice	2

COURSE DESCRIPTIONS

Students will take six credits per trimester.

NTR 5104 **3 credits**
Biochemistry I: The Macronutrients

This is an online interactive course designed to prepare students to understand how carbohydrates, fats, and proteins function in the body; how each macronutrient, alone and when combined, undergoes integrated metabolism within tissues; and how the macronutrients integrate to affect overall metabolism, disease risk and recovery. Suggestions for client counseling on these issues will be presented.

NTR 5106 **3 credits**
Theories and Principles of Applied Clinical Nutrition & Whole Food Science

This is an online interactive course designed to provide an overview of whole food science, which allows students to understand the functions of nutrients in the production, quality and consumption of foods and how they are to be prepared consistent with food safety precautions. This course will introduce the factors that influence the end quality of foods, which include the production, selection, storage, preparation, and ingredient modifications. This course will provide students with the core knowledge of the current nutritional landscape in regards to the regulatory environment, nutritional topics and strategies as well as an introduction to the issues associated with developing a nutritional business. Addressed are common current nutritional intervention plans currently used by the nutritional professional. Clinical applications will be reviewed and discussed.

NTR 5206 **3 credits**
Biochemistry II: The Micronutrients

This course explores the metabolic pathways to which micronutrients (vitamins and minerals) play a significant regulatory role as well as the interaction between nutrients within these pathways. In this course students will also explore the variability in micronutrient requirements between individuals, outline the signs and symptoms associated with both nutrient deficiency and excess, and evaluate possible dosages associated with different forms of micronutrient supplements. Food sources for micronutrients and the various uses with respect to disease prevention and therapy in industrialized countries will be reviewed.

NTR 5207
Nutrition Across the Lifespan **3 credits**

This is an online interactive course focusing on the fundamentals of normal nutrition from preconception to old age. Special attention will be paid to the clinical and nutritional interventions that apply to each part of the life cycle. In addition to the essential nutrition concepts, physiological principles and nutritional recommendations, we will apply case studies to real life at each stage in development, with consideration of cultural competence and effective client counseling.

NTR 5305 **3 credits**
Design, Analysis, and Critical Evaluation of Research

An online interactive course designed to introduce the graduate student to typical methods in analyzing and interpreting biomedical data and research design. This course will help guide the graduate student in developing research studies, conducting statistical analyses and reading/evaluating the literature.

NTR 5306 **1 credit**
Genomics and Personalized Nutrition

In this course students will learn about the role of genetics in healthcare and the impact that nutrition and modifiable risk factors can have on genetic expression. This course is designed to provide students with the knowledge needed to: interpret the results of genomic testing, correlate genomic data with client presentation, and recommend personalized diet and lifestyle modifications that could impact genetic expression or mitigate the impact of presenting polymorphisms. A case study based approach will be utilized for assisting in teaching about the role of genetics in a personalized nutritional plan.

NTR 5307 **2 credits**
Clinical Nutrition for Pain and Inflammation

This is a course designed to facilitate the use of diet and basic nutritional supplements in clinical practice. The focus is nutritional applications to reduce inflammation and pain. The inflammatory process will be studied in significant detail and related to the process of nociception and pain. Also examined will be the relationship between chronic inflammation and various degenerative diseases. Practical nutritional applications will be directed at reducing inflammation with diet and supplements.

NTR 5402 **3 credits**
Drug Induced Nutrient Depletion & Herb/Drug Interaction

This is an interactive course describing the numerous drugs can cause depletions through a variety of biochemical mechanisms. Depletion of nutrients can lead to alterations in physiology, leading to side effects, adverse clinical symptoms and disease. This course will review the most significant drug induced nutrient depletions and their impact on the body. This course will also review the most significant herb/drug interactions and provide a review of databases and information relating to this topic. Scientific studies that report, verify, and explain these two prominent issues in integrative care will be reviewed and discussed.

NTR 5406 **3 credits**
Clinical Herbalism

This is an online course focusing on the use of natural materials as therapeutic agents. Plants have yielded many important medicines; in this course students will learn to understand the pharmacological and biological effects of medicinal herbs, as well as how to properly select and prepare them for clinical use. The biochemical constituents of plant extracts and the isolation of their active components, as well as relevant clinical studies will be explored.

NTR 5503 **3 credits**
Nutrition Assessment

Clinical nutrition not only assesses deficiency states, but can be used to improve health via proper food selection and nutrition supplementation. A clinical and laboratory assessment enables a healthcare provider to develop an individualized therapeutic program to address deficiencies and disease states. This interactive online course will educate the student on the assessment of a client's state of health, diet and lifestyle history, anthropometric measurements, as well as laboratory testing including analysis of blood, stool, saliva, and urine. The course will integrate use of these measurements in the design of an appropriate nutritional protocol for the client. The student will also learn effective client management and follow-up.

NTR 5504 **1 credit**
The Microbiome and Gastrointestinal Health

In this course, the student will take an in-depth dive into the functions of the Gastrointestinal system with a particular focus on the microbiome and the impact of dysfunction. Immunity, digestion, assimilation, absorption, and elimination will be reviewed in the context of function along with the health of the epithelial membrane and microbiome. This course will stress the importance of the microbiome in influencing other systems and for the development of a patient-centered approach for assessing, diagnosing and treating gastrointestinal imbalances. Case studies will be used to assist the student in developing their clinical skills for the assessment and treatment to gastrointestinal system related conditions.

NTR 5605 **2 credits**
Medical Nutrition Therapy

This course will focus on the use of medical nutrition therapy for the management and support of health and disease. Specific nutrition intervention including diet, vitamins, minerals, essential fatty acids, and amino acids will be explored for a wide variety of diseases commonly encountered in clinical practice. The biochemistry of each intervention will be discussed for a full understanding of how to integrate nutrition therapy into patient care.

NTR 5610 **2 credits**
Clinical Nutrition Capstone Project

The final project is a culmination of what the student has learned throughout the Master of Science in Applied Clinical Nutrition program. Working with a faculty member, the student will develop a final project, which will be a detailed case study. The successful completion of the capstone project should demonstrate a thorough understanding of the application of Clinical Nutrition allowing the student to demonstrate both the didactic and clinical skills of a Nutritionist.

ELECTIVE COURSE DESCRIPTIONS

NTR 5405 **2 credits**
Behavioral Nutrition

Food and nutrition-related behaviors are often key determinants of many health issues such as heart disease and type 2 diabetes. This course is designed to introduce students to the field of behavioral nutrition beginning with an overview of theories of health behavior and concluding with nutrition education techniques to promote effective behavior change from the individual to the population level. Critical analysis of existing behavior change programs creates a meaningful

understanding of the key concepts of behavioral nutrition including: health psychology, behavioral epidemiology, mediating variables, theoretical framework, and cultural competency.

NTR 5604 **2 credits**
Clinical Sports Nutrition

This online interactive course will use exercise physiology as a basis for exploring the acute and chronic adaptations of the body to the strenuous demands of exercise and sports. Topics covered include the physiology of the skeletal, muscular, cardiorespiratory and endocrine systems. Nutritional concepts relating to how the body uses the macronutrients and micronutrients to fuel energy systems will be explored. Popular performance enhancing and weight-loss supplements will be examined. Nutritional and exercise prescription for athletes, adolescents, aging, and diseased-state will be investigated.

NTR 5607 **2 credits**
Introduction to Clinical Practice

This course is designed to provide students with a practical experience overseeing clinical nutrition care for special populations. Students are mentored by a faculty member who is a credentialed nutritionist as they participate in the care of recorded real-life patients via interactive virtual case scenarios. Clinical experiences will cover each of the following categories: professionalism and ethics, nutritional assessment, intervention, education, counseling or management, and monitoring or evaluation. The supervised experience totals 90 hours applicable towards the clinical requirements of the Board of Clinical Nutrition Specialists. This course will provide students with clinical experience combined with a focus on professionalism and ethical decision making.

EDUCATIONAL REQUIREMENTS FOR CERTIFICATION

Nutrition Certification in the U.S.

Northeast College of Health Sciences makes every reasonable effort to qualify its students to sit for all national certifying examinations but makes no assurances that any graduate will be qualified to take the certifying examination in any particular state or pass such examination.

State licensing and certification laws and Boards of Examiners' administrative rules and regulations experience periodic changes; therefore, each candidate desiring to pursue the professional program offered by the College is responsible to ascertain all information relative to their qualifications to practice in any jurisdiction that they select. Applicants who desire detailed information relative to national and/or state certification should contact the relevant national certifying board or state department.

It is the applicant's responsibility to ascertain and comply with certification requirements for any state in which certification is required.

The Master of Science in Applied Clinical Nutrition is not designed to lead to the Registered Dietician (RD) credential. Graduates of the program may not, without holding the appropriate certification, use the term Certified Dietician or Certified Nutritionist in New York state.

To obtain more information regarding certification, contact:

BCNS
Board for Certification of Nutrition Specialists
211 W. Chicago Avenue, Suite 217
Hinsdale, Ill. 60521
https://theana.org
202.903.0267

CNCB
Clinical Nutrition Certification Board
400 Chisholm Place, Suite 303
Plano, Texas 75075
www.cncb.org
972.250.2829

To obtain more information regarding the diplomate exam in Nutrition, contact:

ACBN
American Clinical Board of Nutrition
1665 East 31st Street
Brooklyn, N.Y. 11234
www.acbn.org
540.635.8844

CBCN
Chiropractic Board of Clinical Nutrition
4360 Northlake Blvd., #209
Palm Beach Gardens, Fla. 33410
www.cbcn.us
561.320.2852

Northeast College of Health Sciences has received approval for our Master of Science Degree in Applied Clinical Nutrition to satisfy most of the educational requirements for the BCNS and ACBN exams. Those interested need to contact those agencies regarding additional qualifications.

Master of Science in Human Anatomy and Physiology Instruction

The Master of Science degree in Human Anatomy and Physiology Instruction is an online program.

Purpose Statement

The Master of Science in Human Anatomy and Physiology Instruction degree program builds on the prior graduate or professional school education in anatomy and physiology of terminal healthcare and graduate academic degree holders, thoroughly preparing them as undergraduate educators. This is accomplished through training in the theory and best practices of undergraduate education and specific orientation of the candidate's established and newly acquired skills to the student demographic they will encounter teaching anatomy and physiology to undergraduate students.

Program Goals

1. Prepare healthcare professionals, professional educators, and graduate academic degree holders in a related field to become instructional specialists in the subjects of anatomy and physiology for the undergraduate lecture hall and laboratory.

2. Provide a high-quality educational experience focused on mentorship and the development of instructional skills and tools that are necessary for success in the college and university setting.

3. Expand the career opportunities of healthcare and education professionals.

Program Learning Objectives

Graduates of the Master of Science in Human Anatomy and Physiology Instruction Program will

1. Demonstrate a mastery of the disciplines of anatomy and physiology, across the spectrum of all the systems of the human body, at a level superior to the rigor of a typical undergraduate anatomy and physiology curriculum.

2. Create effective teaching tools and techniques for presenting anatomy and physiology course content at the appropriate rigor for the undergraduate environment. These instruments include course syllabi, lesson plans, lecture outlines, multimedia presentations, laboratory exercises, test banks, and other assessment tools.

3. Apply effective practice principles to instructional designs for anatomy and physiology curricula.

4. Be prepared for employment in the college and university setting.

Admission to the Program

Admission Process and Guidelines

Northeast offers rolling admissions. Applications are accepted until all of the available seats have been filled.

To be certain that students have enough time to complete all steps in the application process, and to have adequate time for appropriate financial aid planning to begin classes when desired, application to Northeast should begin three to six months in advance of the intended start date.

Characteristics of a successful candidate for admission include:

- superior communication skills, both oral and written;
- a good understanding of the nature of the student's intended profession as distinguished from other healing arts;
- evidence of strong motivation to become a healthcare practitioner;
- initiative and honesty, as evidenced by the candidate's transactions within the application process and in all information submitted in support of the application; and
- academic achievement that compares favorably to that of successful students at Northeast.

Northeast only accepts applications online.

Online application:www.northeastcollege.edu/apply. A non-refundable $60 application fee is required at the time of submission. Applications will not be processed until received.

A fee waiver code can be obtained by sending an unofficial transcript to the Admissions office for evaluation prior to submission of the online application.

A one to two page personal statement providing a brief, personal profile of the applicant, including philosophy as a healthcare provider and motivations for applying to Northeast is required.

Eligible applicants will complete a virtual admissions interview with a Northeast faculty member. This interview assesses the candidate's motivational characteristics and personality strengths.

After the applicant has satisfied admission requirements by supplying documentation and completing a faculty interview, the prospective student's complete application package will be reviewed by the Admissions Committee. Upon completion of the review, the applicant will be notified of the College's admission decision. Notification specifying the entering class term is provided to all accepted applicants. Prospective students must have official transcripts from ALL colleges or universities they have attended sent directly to the Northeast Admissions office. For transcripts received from institutions under academic probation by their regional accrediting organization, credit received for coursework completed while the institution was accredited will be accepted. An official acceptance occurs only after the selected candidate has supplied official transcripts and other documents as required.

Applicants notified of acceptance or invited to continue their candidacy are expected to complete a decision reply form and deposit to indicate their enrollment intentions. Those accepting an offer of admission must make a non-refundable deposit of $400 within 30 days following notification to secure a seat in the desired class. The deposit will be applied toward the first trimester's tuition and fees. The Admissions office may adjust the non-refundable deposit amount depending on the application date in relation to the trimester start date.

Submission of fraudulent documents, misrepresentation, or deliberate omission of any relevant information in the application process shall be sufficient cause for rejection of the candidate prior to admission, revocation of admission, and dismissal if admitted as a student.

Applications and supplemental documents received will remain active for 12 months from date of submission, at which time they will be deleted.

Notice of Nondiscrimination

Northeast College of Health Sciences admits students of any race, color, religion, disability, national origin, sexual orientation, gender identity or expression, military status, sex, age or marital status to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, religion, disability, national origin, sexual orientation, gender identity or expression, military status, sex, age or marital status in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

Application Deferral

Applicants for a particular term may defer their admission to a subsequent term, with the approval of the Admissions office and based on the availability of space. If space is no longer available for the trimester requested on the application, the applicant will be contacted by the Admissions office and considered for the next available trimester. As a courtesy to other applicants, an accepted candidate who ultimately does not plan to enroll at Northeast is requested to notify the Admissions office of this fact so another student can be admitted in this slot.

Information Sessions

You are invited to attend our virtual or on-campus program events to check out our classrooms, labs, and innovative learning spaces as well as meet our expert faculty and dedicated students.

For further information on registering for an information session, visit https://www.northeastcollege.edu/admissions/open-house.

You are invited to visit the Northeast campus in a variety of formats:

- online virtual tour at https://www.youvisit.com/tour/northeastcollege,
- live virtual tour with a tour guide using FaceTime, Duo or Skype,
- on-campus tour with a tour guide.

For further information on visiting Northeast or to schedule an appointment, contact the Admissions office at 800.234.6922.

Academic Requirements for Admission

Applicants must meet at least one of the following criteria:

1. have earned a professional degree (MSN, M.D., D.O., D.C., DVM, or other similar advanced clinical degree) awarded by an accredited institution; or

2. have earned a master's degree in a related field from an accredited institution; or

3. demonstrate significant anatomy and physiology teaching experience in the undergraduate college/university setting; or

4. demonstrate successful completion of the anatomy and physiology course sequence of an advanced clinical degree; or

5. demonstrate successful completion of a graduate certificate program in anatomy and physiology (minimum 12 credits).

An earned cumulative grade point average of 2.5 or higher on a 4.0 scale is desired.

Transfer Applicants

To be considered for transfer credit,

- course work to be transferred must have been completed within five years of the transfer date;
- a course must be equivalent in content and credit hours to the Northeast course for which credit is sought;
- the student must have earned a grade of C or higher, and not have used the course to meet entrance requirements;
- courses must have been taken at the professional or graduate level; and
- applicants must obtain and complete an application for transfer credit and wait for an evaluation.

An offer of transfer credit, if accepted by the candidate, is not subject to further negotiation after transfer to Northeast.

In consultation with appropriate department heads and faculty, the appropriate academic Dean or Director may grant transfer credit under exceptional or unusual circumstances that vary from the parameters defined above. Under no circumstances will credit be given for life experience.

Under no circumstances can more than 50% of credits be accepted for transfer.

International Applicants

Northeast welcomes applications from international candidates. Applicants who are not U.S. citizens must meet the same entrance requirements as U.S. citizens, or be qualified via a recognized non-U.S. equivalency program. International candidates must complete the same application procedures as all others, and must additionally provide the following:

1. evidence of the ability to read, write, and speak English at a level of mastery sufficient to successfully complete the course of study for the graduate program in Human Anatomy and Physiology Instruction;

2. a comprehensive evaluation of educational credentials by an appropriate agency such as World Education Services (WES), International Education Resource Foundation (IERF), etc.; and

3. certified English translation of educational credentials.

CURRICULUM SUMMARY

The curriculum leading to the Master of Science degree in Human Anatomy and Physiology Instruction requires a minimum of six trimesters (each of 15 weeks' duration) of online part-time study. This is the equivalent of 24 calendar months.

CURRICULUM

Course No./Title		Credits
ITP 5110	Instructional Theory & Practices: Foundations of the Classroom	3
ITP 5120	Instructional Theory & Practices: Elements of Course Development	3
ITP 5135	Instructional Theory & Practices: Designing and Developing For Lab and Blended Learning Environments	3
ITP 5140	Instructional Theory & Practices: Employment in the College/University Setting; Capstone Portfolio Project	3
ITP 5160	Designing Online Courses (elective)	3
HAP 5110*	Introduction to Anatomy and Physiology; Chemistry; Cells; Histology	3
HAP 5120	Integumentary, Skeletal, and Muscular Systems	3
HAP 5130	Nervous System	3
HAP 5140	Endocrine System; Cardiovascular System	3
HAP 5150	Lymphatic System/Immunity, Respiratory System, Digestive System, Metabolism	3
HAP 5160	Urinary System, Acid-Base Balance, Reproductive System, Development/Inheritance	3
HAP 5190	Essentials of Pathophysiology for A&P Instructors	3
Total Required Credits		**36**

* Students are expected to successfully complete this course before enrolling in other HAP-prefix courses, unless permission is granted by the Program Director.

COURSE DESCRIPTIONS

All courses are three credits. Students will take two three-credit courses per trimester.

HAP 5110 **3 credits**
Introduction to Anatomy and Physiology; Chemistry; Cells; Histology

HAP 5110 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on introductory topics, chemistry, cell biology, and histology content. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate. Students are expected to successfully complete this course before enrolling in other HAP prefix courses, unless permission is granted by the Program Director.

HAP 5120 **3 credits**
Integumentary, Skeletal, and Muscular Systems

HAP 5120 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on integumentary, skeletal, and muscular system content. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate.

HAP 5130 **3 credits**
Nervous System

HAP 5130 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on nervous system content, including nerve tissue, spinal cord, brain, ANS, sensory-motor integration, and special senses. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate.

HAP 5140 **3 credits**
Endocrine System; Cardiovascular System

HAP 5140 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on endocrine and cardiovascular systems content. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate.

HAP 5150 **3 credits**
Lymphatic System/Immunity, Respiratory System, Digestive System, Metabolism

HAP 5150 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on the lymphatic system and immunity, the respiratory and digestive systems, and metabolism. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate.

HAP 5160 **3 credits**
Urinary System, Acid-Base Balance, Reproductive System, Development/Inheritance

HAP 5160 is an online course designed to prepare and submit the Human and Anatomy & Physiology Instruction candidate to effectively deliver A&P course content at the undergraduate level. The course focuses on the urinary and reproductive systems, acid/base balance, development and inheritance. This course will guide the candidate in understanding the appropriate level of instructional rigor for the undergraduate nursing and allied health student while enhancing the graduate level expertise of the program candidate.

HAP 5190 **3 credits**
Essentials of Pathophysiology for A&P Instructors

HAP 5190 is an online course which focuses on the basic concepts of pathophysiology and addresses the physiological progression of disease and injury relating to each body system. It is designed to augment the required core courses of the program, enhancing the candidate's effective delivery of A&P course content at the undergraduate level by learning how to integrate

current topics in pathophysiology and mechanisms and manifestations of disease into the lecture.

ITP 5110 **3 credits**
Instructional Theory & Practices: Foundations of the Classroom

In this course, students will gain knowledge, skills and experiences with a variety of information regarding instructional theory and principles. The content of this course will guide the student in preparing to teach in an undergraduate or allied health program.

ITP 5120 **3 credits**
Instructional Theory & Practices: Elements of Course Development

This course is based on the foundations of the classroom course in that it will enhance the learners' knowledge of pedagogy by building upon the content which was previously learned. The content of this course includes specifics of course design and development and at the conclusion students will be able to create and plan the necessary educational tools to teach a course.

ITP 5135 **3 credits**
Instructional Theory & Practices: Designing and Developing For Lab and Blended Learning Environments

ITP 5135 is based on the educational theories and principles taught in the previous ITP courses. This course will expand the students' current knowledge of basic pedagogy by focusing on course work in a lab and blended setting, as well as preparing the student for the capstone ITP course.

ITP 5140 **3 credits**
Instructional Theory & Practices: Employment in the College/University Setting; Capstone Portfolio Project

ITP 5140 is an online course designed to equip the program candidate with a detailed appreciation of the practical issues relating to employment as an anatomy & physiology instructor in the undergraduate setting. The compilation of the instructional tools developed by the student throughout the program into a comprehensive teaching portfolio will serve as the capstone project of the program.

ELECTIVE COURSE DESCRIPTIONS

ITP 5160 **3 credits**
Designing Online Courses

This course will reintroduce and expand upon the theories, principles, practice, and design of teaching in the online setting. Students will explore pedagogical options for designing and implementing online and blended lessons and fully online courses. This course culminates in the creation of an online module within the learning management system.

REQUIREMENTS FOR GRADUATION

In order to be eligible for graduation from the program, candidates must meet the following criteria:

1. Successful completion of all required course work, with a cumulative grade point average of 2.00 or higher;
2. Successful completion of a teaching practicum during the last year of the program as deemed necessary by the program director;
3. Fulfillment of all financial obligations to the College.

It is solely the responsibility of the degree candidate to comply with all requirements for the degree. The institution's effort to monitor student progress toward graduation does not relieve the individual of primary responsibility in this matter.

Bachelor of Professional Studies

Purpose Statement

The Bachelor of Professional Studies degree program provides a life-science degree for Northeast College of Health Sciences students who need/or desire to complete their undergraduate studies.

Program Goals

1. To provide a high quality educational program to students of Northeast interested in obtaining a baccalaureate degree of professional studies in life sciences.

2. To provide a program of study that enhances the eligibility of graduates for licensure in those jurisdictions where a baccalaureate degree is required prior to graduation from a professional program.

3. To allow Northeast students to be eligible for enrollment in graduate programs that require an undergraduate degree in a life-science-oriented field.

4. To prepare graduates to work and communicate collaboratively in an interdisciplinary healthcare setting.

Program Learning Outcomes

1. Integrate previously acquired concepts and principles of the basic sciences and natural healthcare philosophies to strengthen the correlation of patient centered care associated with complementary and alternative medicine therapies.

2. Analyze and synthesize the roles of complementary and alternative medicine and allopathic practices in integrative healthcare settings.
3. Describe the accepted definitions of various healthcare therapies, their scientific theories, and the potential benefits obtained by the therapies.

4. Research and evaluate information related to complementary and alternative medicine therapies that have impact on patient centered care.

5. Utilize effective written and verbal skills to communicate concepts related to complementary and alternative medicine and allopathic practices.

6. Demonstrate professional behavior in an educational integrative healthcare learning environment.

Program Description

Northeast College of Health Sciences (Northeast) offers a 123- semester-credit-hour baccalaureate degree program: the Bachelor of Professional Studies (BPS) with a major in Life Sciences. Only students enrolled in the D.C. program at Northeast are eligible to participate in the BPS program.

BPS Program Requirements for D.C. Students

1. Completion of 90 undergraduate credits, including 33 credits in liberal arts and science courses;

2. Completion of 30 approved credits* taken at Northeast within the D.C. curriculum; and

3. Completion of the three-credit capstone course, Integrative Healthcare (BPS 4001).

*A grade of C or better must be earned in each Northeast course to be counted for credit toward the BPS degree. Full-time D.C. students become eligible after successful completion of all third-trimester course work in the D.C. program and the required 30 credits of Northeast foundational science course work with a C or better.

For additional information, contact the Director of the BPS program, Alexandra Fiore, D.C., M.S. at 315.568.3237 or by email afiore@northeastcollege.edu.

COURSE DESCRIPTION – BPS CAPSTONE COURSE

BPS 4001 **45 hours, 3 credits**
Integrative Healthcare

This is the capstone course for students registered in the Bachelor of Professional Studies program. This is an online experiential course that presents and discusses the roles of complementary and alternative medicine (CAM) and allopathic practices in integrative healthcare settings. The course provides information and discussion regarding the accepted definition of various healthcare therapies, primary conditions addressed, and potential benefits obtained by the therapy. An emphasis of this course is to explore, where possible, the current scientific theory behind the therapies discussed, and prepare students to obtain and evaluate information to direct future patient education.

Master of Science in Diagnostic Imaging

Purpose Statement

The Master of Science in Diagnostic Imaging degree program is a postgraduate residency that advances the Mission and Values of Northeast by training chiropractic diagnostic imaging specialists through a comprehensive academic, clinical, interprofessional, patient-centered and evidence-informed curriculum.

Program Description

The residency is a three-year, full-time program devoted to the discipline of chiropractic radiology and includes academic, clinical, and scholarly components. The program leads to a Master of Science degree in Diagnostic Imaging and qualifies successful candidates to sit for the examinations leading to the professional certification "Diplomate of the American Chiropractic Board of Radiology" (DACBR).

The program is rigorous and residents are selected on a competitive basis for limited openings. Applicants are chosen based upon a written examination, oral practical examinations, and an interview with the residency selection committee. Resident duties include teaching in laboratories and lectures of various radiology courses, didactic and film interpretation tutorial sessions, clinical rotations in outpatient clinics, and rotations through outside imaging centers. Additionally, residents are responsible for the design and completion of a master's thesis.

Program Goals

1. Prepare doctors of chiropractic to serve as experts in diagnostic imaging with a focus on the neuromusculoskeletal system, while also having a broad scope of knowledge in intra-thoracic and abdominal pathology.

2. Provide a high-quality and diverse educational experience in the interpretation of all of the modalities of diagnostic imaging, including but not limited to radiography, MRI, CT, scintigraphy, ultrasonography.

3. Develop intra- and inter-professional written and verbal communication skills to assist and guide consulting health care providers in providing high quality, evidence-informed, patient-centered care.

4. At the completion of the program of study, the resident will earn a master of science degree in diagnostic imaging by completing and defending a master's thesis, and be prepared to pass the Diplomate examinations of the American Chiropractic Board of Radiology.

Program Objectives

Graduates of the Master of Science in Diagnostic Imaging program will be able to:

1. Demonstrate knowledge in the application and interpretation of diagnostic imaging, including diagnoses, differential diagnoses, comorbidities, and incidental findings during resident sessions with board certified radiologists and by successfully passing didactic and practical examinations.

2. Demonstrate the ability to access and utilize appropriate evidence, information, and resources to support and help inform the diagnostic investigation, as well as the evaluation and management options for the identified pathologies.

3. Provide effective written and verbal interpretation of diagnostic imaging studies with appropriate recommendations to referring clinicians consistent with the laws/rules/regulations of the profession, and the standards of care.

4. Create evidence informed written literature consistent with the standards of peer-review, and educational presentations to assist members of the healthcare professions in furthering their knowledge of diagnostic imaging and patient-centered imaging practices.

5. Evaluate diagnostic imaging to inform referring imaging sources (e.g. clinicians, imaging centers) as to their legal/ethical requirements in producing quality diagnostic imaging, and to troubleshoot

problems to resolve sources of reduced diagnostic quality.

6. Demonstrate ethical and compassionate behaviors contributing to quality patient-centered care.

POSITION REQUIREMENTS

1. Candidates must apply by submitting an application to the office of Human Resources.

2. Applicants must have a radiology course CGPA of at least 3.0 with no grade lower than a "C" in any radiology course.

3. It is recommended that the candidate have at least a 3.0 overall chiropractic college GPA.

4. Applicants must hold a bachelor's degree or its equivalent from an accredited institution of higher learning.

5. Applicants must hold a Doctor of Chiropractic degree and have successfully completed all four parts of the U.S. National Board of Chiropractic Examiners examinations.

6. Applicants must be eligible for New York State chiropractic licensure.

Residents are paid a competitive salary, are eligible to participate in Northeast's benefits package, and also may qualify for postdoctoral grants with certain funding agencies.

Interested individuals should contact the Director of the program for an application:

Chad D. Warshel, D.C., M.S., DACBR
Northeast College of Health Sciences
2360 State Route 89
Seneca Falls, NY 13148

Email: cwarshel@northeastcollege.edu
Phone: 315.568.3297

Academic Program Total:
810 Contact Hours, 54 Credits

COURSE DESCRIPTIONS

AST 6556 **30 hours, 2 credits**
Preparation as a College Educator

This interactive course will explore the elements of how to prepare and deliver courses at the college level. The content will include adult education theories, current educational research and course design. Class discussion and projects will include practical and theoretical aspects of course design including: learning objectives and syllabus design; decisions in course content, preparation and delivery; assessment design, analysis and grading; and issues of instructional inclusiveness.

NTR 5303 **45 hours, 3 credits**
Design, Analysis, and Critical Evaluation of Research

An online interactive course designed to introduce the graduate student to typical methods in analyzing and interpreting biomedical data and research design. This course will help guide the graduate student in developing research studies, conducting statistical analyses and reading/evaluating the literature.

RAD 5101 **22.5 hours, 1.5 credits**
Hematopoietic, Metabolic, Endocrine, and Nutritional Disturbances of Bone

A tutorial group (session) and laboratory course focusing upon hematopoietic, metabolic, endocrine, and nutritional disturbances of bone. This course represents an intermediate level study of the pathologic and diagnostic imaging manifestations of these disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Evaluation of plain film radiographic abnormalities will be emphasized.

RAD 5110 **7.5 hours, .5 credit**
Infectious Disorders of Bone

A tutorial group (session) and laboratory course focusing upon infectious lesions of bone. This course represents an intermediate level study of the pathologic and diagnostic imaging manifestations of osteomyelitis and infectious related disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5112 **30 hours, 2 credits**
Chest Imaging

A tutorial group (session) and laboratory (film and anatomy) course focuses upon normal and pathologic conditions of the thorax. This course represents an intermediate level study of the epidemiological, plain film radiographic and advanced imaging manifestations of pathologic disorders of the chest. Additional areas to be covered include terminology, associated imaging, management, prognosis, and allied topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5202 **15 hours, 1 credit**
Arthritides

A tutorial group (session) and laboratory course focusing upon articular abnormalities. This course represents an intermediate level study of the pathologic and diagnostic imaging manifestations of arthritis and arthritic related disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5203 **30 hours, 2 credit**
Internal Derangement of Joints 1

This practical and didactic course focuses upon internal derangement of joints. This course reviews the pathophysiology and diagnostic imaging of internal derangement of joints and related disorders. Areas to be covered include: principles of magnetic resonance imaging (MRI), computed tomography (CT), and diagnostic ultrasound (DxUS); terminology associated with internal derangement of joints; diagnostic imaging manifestations; management; prognosis; and associated topics. This course focuses on imaging of the shoulder, knee, ankle, and foot.

RAD 5204 **15 hours, 1 credit**
Neoplastic and Neoplastic-Like Lesions of Bone

A tutorial group (session) and laboratory course focuses upon neoplastic and neoplastic-like lesions of the musculoskeletal system. This course represents an intermediate level study of the epidemiological and diagnostic imaging manifestations of neoplastic and

neoplastic-like lesions of the musculoskeletal system and related disorders. Additional areas to be covered include terminology, advanced imaging, management, prognosis, and associated topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5206 30 hours, 2 credits
Gastrointestinal/Genitourinary Tract Imaging

A tutorial group (session) and laboratory (film and anatomy) course focuses upon disorders of the Gastrointestinal/Genitourinary Tract. This course represents an intermediate level study of the anatomic, etiologic, conventional imaging, and advanced imaging of the Gastrointestinal/ Genitourinary Tract and related disorders.

RAD 5302 15 hours, 1 credit
Physical Injury of the Skeletal System

A tutorial group (session) and laboratory course focuses upon physical injury (trauma) of the skeletal system. This course represents an intermediate level study of the etiologic and diagnostic imaging manifestations of physical injury of the skeletal system and related disorders. Additional areas to be covered include terminology, advanced imaging, management, prognosis, and associated topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5306 30 hours, 2 credits
Neuroimaging

An intermediate level course using tutorial group (session) and laboratory (film and anatomy) focusing upon the anatomic, etiologic, conventional imaging, and advanced imaging of the brain and spinal cord.

RAD 5402 22.5 hours, 1.5 credits
Advanced Hematopoietic, Metabolic, Endocrine and Nutritional Disturbances of Bone

A tutorial group (session) and laboratory course focusing upon hematopoietic, metabolic, endocrine and nutritional disturbances of bone. This course represents an advanced level study of the pathologic and diagnostic imaging manifestations of these disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Evaluation of plain film radiographic abnormalities will be emphasized.

RAD 5404 7.5 hours, .5 credit
Advanced Infectious Disorders of Bone

A tutorial group (session) and laboratory course focusing upon infectious lesions of bone. This course represents an advanced level study of the pathologic and diagnostic imaging manifestations of osteomyelitis and infectious related disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5406 30 hours, 2 credits
Advanced Chest Imaging

A tutorial group (session) and laboratory (film and anatomy) course focuses upon normal and pathologic conditions of the thorax. This course represents an advanced level study of the epidemiological, plain film radiographic, and advanced imaging manifestations of pathologic disorders of the chest. Additional areas to be covered include terminology, associated imaging, management, prognosis, and allied topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5502 15 hours, 1 credit
Advanced Arthritides

A tutorial group (session) and laboratory course focusing upon articular abnormalities. This course represents an advanced level study of the pathologic and diagnostic imaging manifestations of arthritis and arthritic related disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5504 15 hours, 1 credit
Advanced Neoplastic and Neoplastic- Like Lesions of Bone

A tutorial group (session) and laboratory course focuses upon neoplastic and neoplastic-like lesions of the musculoskeletal system. This course represents an advanced level study of the epidemiological and diagnostic imaging manifestations of neoplastic and neoplastic-like lesions of the musculoskeletal system and related disorders. Additional areas to be covered include terminology, advanced imaging, management, prognosis,

and associated topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5506 30 hours, 2 credits
Advanced Gastrointestinal/Genitourinary Tract Imaging

A tutorial group (session) and laboratory (film and anatomy) course focuses upon disorders of the Gastrointestinal/Genitourinary Tract. This course represents an advanced level study of the anatomic, etiologic, conventional imaging, and advanced imaging of the Gastrointestinal/Genitourinary Tract and related disorders.

RAD 5508 30 hours, 2 credits
Special Topics in Clinical Radiology I

This course is an in-depth examination of a specific topic in radiology. The graduate student will assess the state of the current literature on a specific subject with purpose of communicating the information in the form of a case study suitable for publication. Content will be based on the subject selected and will discuss the epidemiology and pathogenesis, clinical presentation, diagnostic features with an emphasis on diagnostic radiology, treatments, prognosis, and outcomes.

RAD 5602 15 hours, 1 credit
Advanced Physical Injury of the Skeletal System

A tutorial group (session) and laboratory course focuses upon physical injury (trauma) of the skeletal system. This course represents an advanced level study of the etiologic and diagnostic imaging manifestations of physical injury of the skeletal system and related disorders. Additional areas to be covered include terminology, advanced imaging, management, prognosis, and associated topics. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5607 30 hours, 2 credit
Internal Derangement of Joints 2

This practical and didactic course focuses upon internal derangement of joints. This course reviews the pathophysiology and diagnostic imaging of internal derangement of joints and related disorders. Areas to be covered include: principles of magnetic resonance imaging, computed tomography, and diagnostic ultrasound; terminology associated with internal derangement of joints; diagnostic imaging manifestations; management; prognosis; and associated topics. This course focuses on imaging of the temporomandibular joint, hip, elbow, and wrist/hand.

RAD 5606 30 hours, 2 credits
Advanced Neuroimaging

An advanced level course using tutorial group (session) and laboratory (film and anatomy) focusing upon the anatomic, etiologic, conventional imaging, and advanced imaging of the brain and spinal cord.

RAD 5609 15 hours, 1 credits
Business of Radiology

A business course designed for the MSDI in which the basic fundamentals of diagnostic imaging business will be discussed. This course will assist residents in developing a plan to launch a diagnostic imaging consultation practice. Students will have a basic understanding of the business culture related to health care. They will be able to apply these basic principles to their future practice. This will be a graduate level business course with a health care concentration.

RAD 5702 30 hours, 2 credits
Congenital Anomalies and Skeletal Dysplasias

A tutorial group (session) and laboratory course focusing upon congenital anomalies and skeletal dysplasias. This course represents an advanced level study of the pathologic/genetic and diagnostic imaging manifestations of congenital anomalies and skeletal dysplastic related disorders. Additional areas to be covered include epidemiology, general diagnostic criteria, advanced imaging, management, prognosis, and associated diseases. Identification of plain film radiographic abnormalities will be emphasized.

RAD 5704 30 hours, 2 credits
Principles of Diagnostic Imaging

A tutorial group (session) and laboratory course focusing upon principles of diagnostic imaging. This course represents an advanced study of the physical principles involved in obtaining plain film radiographs, radiation protection, radiobiology, and advanced imaging.

RAD 5706 30 hours, 2 credits
Teaching Practicum I

This course is the first in a series of three teaching practicum where the graduate student will be directing the instruction of professional level courses at Northeast. The student will take the responsibility of

course director for one radiology course in the D.C. program. The teaching experience will vary, depending upon course offerings at the time, but will typically include one of the following: physics of diagnostic imaging, normal spinal radiological anatomy, normal extraspinal radiological anatomy, soft tissue and advanced imaging, radiographic positioning or an elective class. The student will act under the guidance of the director.

RAD 5802 **30 hours, 2 credits**
Special Topics in Clinical Radiology II

This course is a second look at an in-depth examination of a specific topic in radiology. The graduate student will assess the state of the current literature on a specific subject with purpose of communicating the information in the form of a case study suitable for publication. Content will be based on the subject selected and will discuss the epidemiology, pathogenesis, clinical presentation, diagnostic features with an emphasis on diagnostic radiology, treatments, prognosis, and outcomes.

RAD 5806 **30 hours, 2 credits**
Teaching Practicum II

This course is the second in a series of three teaching practicum where the graduate student will be directing the instruction of professional level courses at Northeast. The student will take the responsibility of course director for one radiology course in the D.C. program. The teaching experience will vary, depending upon course offerings at the time, but will typically include one of the following: physics of diagnostic imaging, normal spinal radiological anatomy, normal extraspinal radiological anatomy, soft tissue and advanced imaging, radiographic positioning or an elective class. The student will act under the guidance of the director.

RAD 5902 **30 hours, 2 credits**
Special Topics in Clinical Radiology III

This course is an in-depth examination of four specific topics in radiology. The graduate student will assess the state of the current literature of four specific subjects with the purpose of communicating the information in the form of a presentation to students enrolled in the Doctor of Chiropractic program and their supervising clinicians. The selected topics should be based upon clinical cases encountered by the graduate student during their residency and must include the following: three musculoskeletal case studies all of which must have plain films, at least one must be of the spine, and at least one must have advanced imaging; and one other case study, in either chest, abdomen, or neuroradiology areas. Content will be based on the subject selected and will discuss the epidemiology, pathogenesis, clinical presentation, diagnostic features with an emphasis on diagnostic radiology, treatments, prognosis, and outcomes.

RAD 5906 **30 hours, 2 credits**
Teaching Practicum III

This course is the third in a series of three teaching practicum where the graduate student will be directing the instruction of professional level courses at Northeast. The student will take the responsibility of course director for one radiology course in the D.C. program. The teaching experience will vary, depending upon course offerings at the time, but will typically include one of the following: physics of diagnostic imaging, normal spinal radiological anatomy, normal extraspinal radiological anatomy, soft tissue and advanced imaging, radiographic positioning or an elective class. The student will act under the guidance of the director.

RES 5410 **30 hours, 2 credits**
Thesis I

This course is an intermediate step in the creation of the graduate student's thesis project. The graduate student will determine a hypothesis or question to answer in the field of diagnostic imaging, perform a literature review and develop a research methodology to answer that question. Content will be based on the subject selected and will discuss the feasibility of the project, introduction method, discussion, conclusion of the literature review, and sample, measures, design, procedures of the methodology.

RES 5810 **30 hours, 2 credits**
Thesis II

This course is the second intermediate step in the creation of the graduate student's thesis project. After having previously formulated a research hypothesis, performed a literature review and developed a research method, the student will examine the research data and present the results analysis. Content will be based on the subject selected and will discuss the data preparation, descriptive statistics and conclusion validity.

RES 5910 **30 hours, 2 credits**
Thesis III

This course is the final step in the creation of the graduate student's thesis project. After having previously formulated a research hypothesis, performed a literature review, developed a research method, analyzed the research results, the student will finalize the project by developing an introduction, discussing the results, giving recommendations, and concluding on the project. Content will be based on the subject selected and will include the creation of a title page, structured abstract, introduction, methods, results, discussion, recommendations, conclusion, and references. Emphasis will be placed on the introduction and discussion portions of the thesis, as the methods and results have been previously assessed.

Master of Science in Clinical Anatomy

PURPOSE STATEMENT

The Master of Science in Clinical Anatomy graduate degree program provides a comprehensive professional education that focuses on developing professional teachers of human applied clinical anatomy. Through Northeast College of Health Sciences and cooperating institutions, students are trained in pedagogical technique and practical teaching experience to students of chiropractic, medicine, nursing, and other healthcare professions.

PROGRAM DESCRIPTION

The residency program is a three-year, full-time program devoted to the discipline of teaching anatomical sciences in clinical settings. It includes academic, pedagogical, and scholarly components. The program leads to a Master of Science degree in Clinical Anatomy. The graduate of the program will have expertise and experience to teach human gross anatomy, neuroanatomy, embryology, and histology in a variety of educational and healthcare settings.

The program is rigorous, and students are selected on a competitive basis for limited openings. Applicants are chosen based upon academic credentials and an interview with the selection committee. Clinical Anatomy student responsibilities include teaching in laboratories and lectures of various anatomical sciences courses, both at Northeast and at our partner institutions. Additionally, students are responsible for the design and completion of a master's thesis.

PROGRAM GOALS

1. Prepare students to serve as educators in gross anatomy, histology, embryology, and neuroanatomy.

2. Provide a high-quality and diverse educational experience in the above areas of anatomy within a clinical context.

3. Develop intra- and inter-professional written and verbal communication skills to assist and guide consulting health care providers, educators and students.

4. At the completion of the program of study, the resident will earn a master of science degree in clinical anatomy by completing and defending a master's thesis.

PROGRAM OBJECTIVES

Graduates of the Master of Science in Clinical Anatomy program will be able to:

1. Demonstrate knowledge in the areas of gross anatomy, histology, embryology, and neuroanatomy, by successfully passing didactic and practical examinations.

2. Demonstrate the ability to be a successful contributing member of a team of instructors under the mentorship and supervision of assigned lead faculty within the classroom laboratory.

3. Provide effective written and verbal interpretation of anatomical knowledge evidenced by successful completion of course requirements and thesis project.

4. Create and deliver evidence informed learning experiences that align with assigned course syllabi.

5. Demonstrate ethical and compassionate behaviors towards whole-body donation, cadaver dissection and students engaging in learning from human cadaveric material.

ADMISSION TO THE PROGRAM

Candidates must apply by submitting an application to the Human Resources Department.

The candidate must have a minimum of a Bachelor of Science degree in the biological sciences or related field or a Master of Science or doctoral degree in the allied health sciences professions.

If the successful candidate holds a Bachelor of Science degree in the biological sciences or related field, part of their workload may include attending lecture sessions in

the gross anatomy and neurosciences courses in addition to their clinical anatomy courses and assist assignments.

Residents are paid a competitive salary, are eligible to participate in Northeast's benefits package, and also may qualify for postdoctoral grants with certain funding agencies.

Interested individuals should contact the Director of the Master of Science in Clinical Anatomy program for an application:

Michael P. Zumpano, Ph.D., D.C.
Director, Master of Science in Clinical Anatomy Program
Northeast College of Health Sciences
2360 State Route 89
Seneca Falls, NY 13148

Email: mzumpano@northeastcollege.edu
Phone: 315.568.3196

Academic Program Total: 37 credits

COURSE DESCRIPTIONS

AST 6556 **2 credits**
Preparation as a College Educator
Prerequisites: Entrance requirements
Prerequisite for: CAN 5203, CAN 5504

This interactive course will explore the elements of how to prepare and deliver courses at the college level. The content will include adult education theories, current educational research and course design. Class discussion and projects will include practical and theoretical aspects of course design including: parameters of learning objectives and syllabus design, decisions in course content, preparation and delivery, assessment design, analysis, and grading and issues of instructional inclusiveness.

CAN 5103 **2 credits**
Clinical Anatomy

This course is an in-depth examination of regional gross anatomy examined in greater detail than presented in the Northeast Doctor of Chiropractic Program human gross anatomy sequence. Content will be presented regionally with emphasis on common clinical complaints associated with each region.

CAN 5104 **3 credits**
Advanced Embryology

This course is an in-depth examination of developmental anatomy, examined in greater detail than undergraduate courses. Content will be organized around development of major organ systems, with particular emphasis on developmental dysmorphologies that arise with abnormal growth and differentiation.

CAN 5201 **2 credits**
Special Topics – Neuroanatomy
Prerequisites: Entrance requirements

This course is an in-depth examination of specific topics in neuroanatomy and neurophysiology, examined in greater detail than in the required prerequisite neurosciences sequence. Content will address clinical applications, with particular emphasis on developmental and acquired diseases and defects, and implications for health and well-being.

CAN 5203 **2 credits**
Teaching Methodology
Prerequisite: AST 6556

Continuation of topics covered in Preparation as a College Educator. This interactive course will explore the elements of teaching and assessment in medical education. The content will build upon previous theories and teaching methods with an emphasis on effective teaching, skilled educational planning, and informed assessment and evaluation.

CAN 5301 **2 credits**
Special Topics – Histology
Prerequisites: Entrance requirements

This course is an in-depth examination of specific topics in histology, examined in greater detail than in the prerequisite cell and tissue biology prerequisite. Content will be organized around tissues and organ systems, with particular emphasis on organogenesis, genetic control of development, developmental defects, and implications for postnatal health and well-being. When resources permit, hands-on preparation and examination of histological specimens will be included in the course.

CAN 5303 **2 credits**
Cross Sectional Anatomy

This course reinforces the student's core content knowledge of gross anatomy by teaching them how to clinically problem solve using cadaveric cross sections, plastic models, MRI, and CT imaging. The student will also be instructed in how to prepare anatomical cross sections from cadaveric specimens.

CAN 5402 **2 credits**
Special Topics – Embryology

This course is an in-depth examination of a specific topic or topics in embryology, examined in greater detail than in the previous developmental anatomy course. Content will be determined after the first meeting of the class.

CAN 5403 **2 credits**
Advanced Special Dissection

A practical skill based course in which the students, under the direction of the course coordinator, will complete specific dissections upon a cadaver. The dissections will be prepared for the purpose of serving as demonstration specimens for the anatomy components of the D.C. program.

CAN 5504 **4 credits**
Teaching Practicum
Prerequisite: AST 6556

In the second year of the program, the student will participate in the teaching of professional level courses at Northeast College of Health Sciences and other participating institutions. This course is inclusive of all the teaching the student has performed. The teaching experience will vary, depending upon course offerings at

the participating institutions and Northeast, but will typically include gross anatomy, neuroanatomy, embryology, and histology. The student will act as an assist/co-lead instructor under the guidance of the particular course coordinator. The student will also be required to perform several guest lectures.

CAN 5602 **4 credits**
Independent Study

Topic to be mutually arranged between the student and the program director. The course provides additional opportunities for the participation in research, development of publishable works, independent studies, off-campus educational experiences or other mutually agreed upon educational training opportunities. Directed study may be performed both on campus or during an off-campus experience such as concurrent with an externship.

RES 5210 **2 credits**
Experimental Analysis
Prerequisite for: RES 5410, RES 5810, RES 5910

A didactic course designed to introduce the graduate student to typical methods in analyzing biomedical data using descriptive and inferential statistics. This course will help guide the graduate student in developing research studies, conducting statistical analyses and reading/evaluating the literature.

RES 5310 **2 credits**
Experimental Design and Research Methodologies
Prerequisite for: RES 5410, RES 5810, RES 5910

A discussion meeting/online course designed to introduce the graduate student to typical biomedical research methods. This advanced course will require the student to critically review a number of current journal articles in their field of expertise.

RES 5410 **2 credits**
Thesis I
Prerequisites: RES 5210, RES 5310
Prerequisite for: RES 5810, RES 5910

This course is an intermediate step in the creation of the graduate student's thesis project. The graduate student ill determine a hypothesis, perform a literature review and develop a research methodology to answer that question. Content will be based on the subject selected and will discuss the feasibility of the project, introduction, method, discussion, conclusion of the literature review, and sample, measures, design, procedures of the methodology.

RES 5810 **2 credits**
Thesis II
Prerequisites: RES 5210, RES 5310, RES 5410
Prerequisite for: RES 5910

This course is the second intermediate step in the creation of the graduate student's thesis project. After having previously formulated a research hypothesis, performed a literature review and developed a research method, the student will examine the research data and present the results analysis. Content will be based on the subject selected and will discuss the data preparation, descriptive statistics and conclusion validity.

RES 5910 **2 credits**
Thesis III
Prerequisites: RES 5210, RES 5310, RES 5410, RES 5810

This course is the final step in the creation of the graduate student's thesis project. After having previously formulated a research hypothesis, performed a literature review, developed a research method, analyzed the research results, the student will finalize the project by developing an introduction, discussing the results, giving recommendations and concluding on the project. Content will be based on the subject selected and will include the creation of a title page, structured abstract, introduction, methods, results, discussion, recommendations, conclusion, and references. Emphasis will be placed on the introduction and discussion portions of the thesis, as the methods and results have been previously assessed. Guidance will be given how to prepare for an oral defense of the project.

Frank J. Nicchi School of Continuing Education

The Frank J. Nicchi School of Continuing Education at Northeast College of Health Sciences offers a wide variety of educational opportunities designed for healthcare professionals. Presented by experts in their respective fields, these synchronous and asynchronous course offerings provide the field practitioner with important clinical perspectives on an array of topics, including evidence-informed models, principles of practice, sports, rehabilitation, research, record keeping, risk management, nutrition, pediatrics, abuse reporting, massage therapy, and patient communication. Some courses offer eligibility for credentialing or certificate programs, such as becoming a medical examiner for the Department of Transportation (DOT) National Registry of Certified Medical Examiners (NRCME), Certified Chiropractic Sports Practitioner (CCSP), New Jersey Licensed Chiropractic Assistant (LCA), or earning a Functional Clinical Nutrition Diplomate through the Chiropractic Board of Clinical Nutrition (CBCN) Board. Courses are available throughout North America leading to fulfillment of license and specialized credentialing board renewal requirements, and can also be utilized to fulfill the annual continuing education requirements of managed-care and health maintenance organizations.

Continuing education courses of various lengths are offered via live classrooms throughout the U.S. and Canada, synchronous webinars, and online recorded webinars. Many of our courses utilize hybrid learning allowing attendees to connect and interact live with the instructor from any location, and therefore, are not restricted under distance learning regulations in most states/provinces. All online recorded webinars are accessible 24 hours per day-seven days per week offering convenient learning opportunities.

The Frank J. Nicchi School of Continuing Education is dedicated to life-long learning empowering you to transform the future of healthcare.

For more information and a complete listing of all continuing education programs, please visit our website at https://ce.northeastcollege.edu. If you have additional questions, please call 800.434.3955.