



*Whichever path you
choose, it begins here.*

For more than 60 years, Northwestern Health Sciences University has worked to develop an **INTERNATIONAL REPUTATION** for excellence in professional education, patient care, clinical research, and community service. At Northwestern, we are committed to providing students with individual attention from a faculty and staff that are second to none; with a rigorous, well-rounded curriculum; and with an unparalleled clinical foundation for building your future as a natural health care practitioner. The combination of Northwestern College of Chiropractic, the Minnesota College of Acupuncture and Oriental Medicine, and the School of Massage Therapy, makes Northwestern one of the leading natural health care institutions in the United States.

This is an institution where men and women from throughout the globe can come together with one mission in mind – advancing the frontiers of natural health care. At Northwestern, they find the resources to become healers, and a University that will prepare them to excel in the health care environment of the 21st Century.

Because many of Northwestern's instructors are also excellent health care practitioners, we are able to pass on to our students, not only technique and skill but the compassion and understanding that only outstanding doctors of chiropractic, massage therapists, and practitioners of acupuncture and Oriental medicine can display to their patients.

The face of health care is changing and the natural health care industry is expanding. Come and be a part of it.

MISSION STATEMENT

The mission of Northwestern Health Sciences University is to advance and promote natural approaches to health through education, research, clinical services and community involvement.

GENERAL INFORMATION

Admissions:

The Office of Admissions

Northwestern Health Sciences University

2501 West 84th Street

Minneapolis, MN 55431

Telephone: 952-888-4777, ext. 409

FAX: 952-888-6713

e-mail: admit@nwhealth.edu

www.nwhealth.edu

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SEPTEMBER 2002

- 2 Holiday – **Labor Day** *No Classes, Offices Closed, Clinics Closed*
- 5 Orientation *Chiropractic*
- 6 Orientation *Acupuncture/Oriental Medicine and Massage Therapy*
- 9 Classes Begin
- 13 National Board Day *No Classes for Chiropractic T6-T7*
N.B.C.E. Exams, *Parts I-III*
- 14 N.B.C.E. Exams, *Parts I-III*
- 15 N.B.C.E. Exams, *Parts I-III*
- 27 Last day to make tuition arrangements. *Failure to do so will result in removal from class rosters and no credit for the term.*

OCTOBER 2002

- 14 Holiday – **Columbus Day** *No Classes, Offices Closed, Clinics Open*



NOVEMBER 2002

- 9 N.C.C.A.O.M. Exams, *Acupuncture, Bodywork*
- 10 N.C.C.A.O.M. Exams, *Chinese herbs*
- 15 N.B.C.E. Exams, *Part IV*
- 16 N.B.C.E. Exams, *Part IV*
- 17 N.B.C.E. Exams, *Part IV*
- 22 N.C.C.A.O.M. Application deadline for February 2003 exam
- 27 *No Classes, Offices Open, Clinics Open*
- 28 Holiday – **Thanksgiving** *No Classes, Offices Closed, Clinics Closed*
- 29 *No Classes, Offices Closed, Clinics Closed*

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DECEMBER 2002

- 9-13 Chiropractic Final Exams
- 16-19 Chiropractic Final Exams
- 19 Last Day of Fall 2002 Trimester
- 23 Offices Open, Clinics Open
- 24 Offices Closed, Clinics Close by 4 p.m.
- 25 Holiday – Christmas Offices Closed, Clinics Closed

WINTER 2003 TRIMESTER

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JANUARY 2003

- 1 Holiday – New Year's Day No Classes, Offices Closed, Clinics Closed
- 2 Orientation Chiropractic
- 3 Orientation Acupuncture/Oriental Medicine and Massage Therapy
N.C.C.A.O.M. Registration deadline for February 2003 exam
- 6 Classes Begin
- 20 Holiday – M.L. King, Jr. Day No Classes, Offices Closed, Clinics Open
- 24 Last day to make tuition arrangements. Failure to do so will result in removal from class rosters and no credit for the term.

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FEBRUARY 2003

- 6 Chiropractic Homecoming No Classes, Offices Open, Bloomington Clinic Closed, Other Clinics Open
- 7 Chiropractic Homecoming No Classes, Offices Open, Bloomington Clinic Closed, Other Clinics Open
- 8 Chiropractic Homecoming
- 11 N.B.C.E. Exams, Application Deadline for May 2003 Part IV
- 17 Holiday – President's Day No Classes, Offices Closed, Clinics Open
- 22 N.C.C.A.O.M. Exams, Acupuncture
- 23 N.C.C.A.O.M. Exams, Chinese herbs

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MARCH 2003

- 14 National Board Day *No Classes for Chiropractic T5-T7*
N.B.C.E. Exams, *Parts I-III*
- 15 N.B.C.E. Exams, *Parts I-III*
- 16 N.B.C.E. Exams, *Parts I-III*
- 28 N.C.C.A.O.M. *Application deadline for June 2003 exam*

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APRIL 2003

- 8-11 Chiropractic Final Exams
- 14-17 Chiropractic Final Exams
- 17 Last Day of Winter 2003 Trimester

SUMMER 2003 TRIMESTER

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MAY 2003

- 1 Orientation *Chiropractic*
- 2 Orientation *Acupuncture/Oriental Medicine and Massage Therapy*
- 5 Classes Begin
- 9 N.C.C.A.O.M. *Registration deadline for June 2003 exam*
- 16-18 Chiropractic National Board Exams, *Part IV*
- 23 Last day to make tuition arrangements. *Failure to do so will result in removal from class rosters and no credit for the term.*
- 26 Holiday – Memorial Day *No Classes, Offices Closed, Clinics Closed*

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JUNE 2003

- 28 N.C.C.A.O.M. Exams, *Acupuncture*
- 29 N.C.C.A.O.M. Exams, *Chinese herbs*

JULY 2003

- 4 **Holiday – Independence Day** *No Classes, Offices Closed, Clinics Closed*
- 25 N.C.C.A.O.M. *Application deadline for October 2003 exam*

AUGUST 2003

- 4-8 Chiropractic Final Exams
- 11-14 Chiropractic Final Exams
- 14 Last Day of Summer 2003 Trimester

FALL 2003 TRIMESTER

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SEPTEMBER 2003

- 1 Holiday – Labor Day *No Classes, Offices Closed, Clinics Closed*
- 4 Orientation *Chiropractic*
- 5 Orientation *Acupuncture/Oriental Medicine and Massage Therapy*
N.C.C.A.O.M. Registration deadline for October 2003 exam
- 8 Classes Begin
- 12 National Board Day *No Classes for Chiropractic T6-T7*
N.B.C.E. Exams, *Parts I-III*
- 13 N.B.C.E. Exams, *Parts I-III*
- 14 N.B.C.E. Exams, *Parts I-III*
- 26 Last day to make tuition arrangements. *Failure to do so will result in removal from class rosters and no credit for the term.*

OCTOBER 2003

- 13 Holiday – Columbus Day *No Classes, Offices Closed, Clinics Open*
- 25 N.C.C.A.O.M. Exams, *Acupuncture, Bodywork*
- 26 N.C.C.A.O.M. Exams, *Chinese herbs*



NOVEMBER 2003

- 14 N.B.C.E. Exams, *Part IV*
- 15 N.B.C.E. Exams, *Part IV*
- 16 N.B.C.E. Exams, *Part IV*
- 26 Classes in Session *Offices Open, Clinics Open*
- 27 Holiday – Thanksgiving *No Classes, Offices Closed, Clinics Closed*
- 28 *No Classes, Offices Closed, Clinics Closed*

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DECEMBER 2003

- 8-12 Chiropractic Final Exams
- 15-18 Chiropractic Final Exams
- 18 Last Day of Fall 2003 Trimester
- 24 *Offices Open, Clinics Open*
- 25 **Holiday – Christmas** *Offices Closed, Clinics Closed*
- 26 *Offices Closed, Clinics Open*

WINTER 2004 TRIMESTER

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JANUARY 2004

- 1 **Holiday – New Year's Day** *No Classes, Offices Closed, Clinics Closed*
- 2 **Orientation** *All Programs*
- 5 **Classes Begin**
- 19 **Holiday – M.L. King, Jr. Day** *No Classes, Offices Closed, Clinics Open*
- 23 **Last day to make tuition arrangements.** *Failure to do so will result in removal from class rosters and no credit for the term.*

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FEBRUARY 2004

- 5 **Chiropractic Homecoming** *No Classes, Offices Open, Bloomington Clinic Closed, Other Clinics Open*
- 6 **Chiropractic Homecoming** *No Classes, Offices Open, Bloomington Clinic Closed, Other Clinics Open*
- 7 **Chiropractic Homecoming**
- 16 **Holiday – President's Day** *No Classes, Offices Closed, Clinics Open*

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MARCH 2004

- 12 National Board Day (probable): *No Classes for Chiropractic T5-T7 N.B.C.E. Exams, Parts I-III*
- 13 N.B.C.E. Exams, *Parts I-III (probable)*
- 14 N.B.C.E. Exams, *Parts I-III (probable)*

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APRIL 2004

- 5-9 Chiropractic Final Exams
- 12-15 Chiropractic Final Exams
- 15 Last Day of Winter 2004 Trimester
- 29 Orientation *Chiropractic*
- 30 Orientation *Acupuncture/Oriental Medicine and Massage Therapy*

SUMMER 2004 TRIMESTER

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MAY 2004

- 3 Classes Begin
- 21 Last day to make tuition arrangements. *Failure to do so will result in removal from class rosters and no credit for the term.*
- 31 Holiday – Memorial Day *No Classes, Offices Closed, Clinics Closed*

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JUNE 2004



JULY 2004

5 **Holiday – Independence Day** *No Classes, Offices Closed, Clinics Closed*

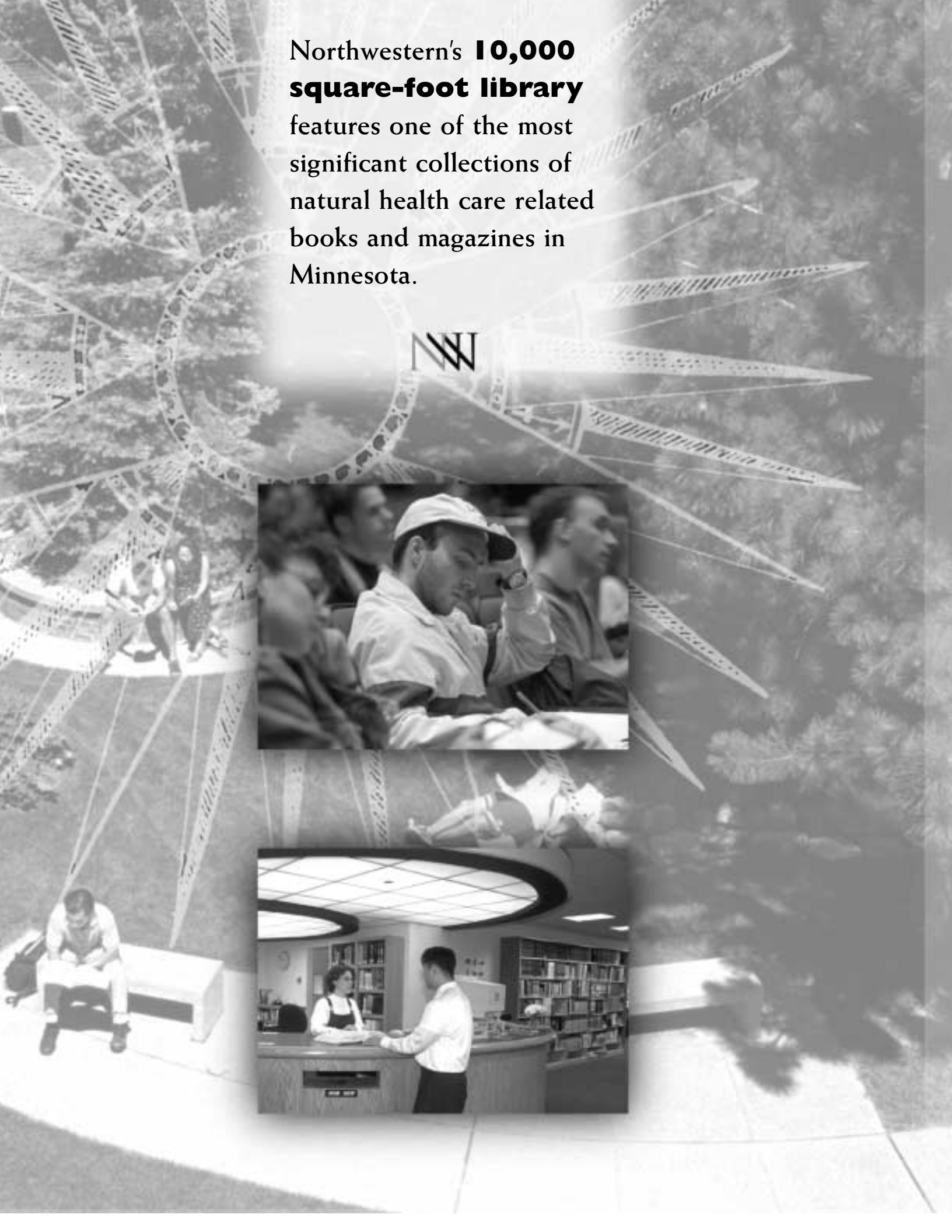
AUGUST 2004

2-6 Chiropractic Final Exams

9-12 Chiropractic Final Exams

12 Last Day of Summer 2004 Trimester

Northwestern's **10,000 square-foot library** features one of the most significant collections of natural health care related books and magazines in Minnesota.



EXPLORE

A New Vision:

Northwestern Health Sciences University

MISSION STATEMENT

The mission of Northwestern Health Sciences University is to advance and promote natural approaches to health through education, research, clinical services and community involvement.

VISION STATEMENT

Our collective vision is to develop an environment that fosters exemplary, innovative and ethically-based educational programs in natural health care. We will also support clinical research, provide leadership for the development of collaborative and integrated health care models, prepare students for successful careers, provide lifelong learning opportunities, and be of service to our community. Through assessment of the academic achievement of our learners and the effectiveness of our research and service programs, we will demonstrate our commitment to excellence and continuous improvement.

GOALS, GUIDING PRINCIPLES AND FUNDAMENTAL VALUES

- We will provide an educational environment that fosters effective teaching and learning.
 - We will improve the effectiveness of our educational, clinical and community service functions through institutional research and assessment.
 - We will practice the science, art and ethics of our professional skills at the highest possible level, informed by evidence and clinical experience.
 - We will create an institutional culture that values and cultivates respect, responsibility, diversity and communication.
 - We will encourage and support clinical research as being necessary for improving the outcomes of care, and the credibility of all healing professions.
 - We will work with professional associations, educational institutions, individual practitioners and others in the health care community to promote public health.
- We will establish an organizational structure and process supporting the responsibility of faculty for the ongoing assessment, development and improvement of our educational programs.
 - We will establish a working and learning environment that fosters equity, respect, trust and the opportunity for personal and professional development.
 - We will provide programs and support services that respond to the changing needs of our learners.
 - We will emphasize the professional values, attitudes and behavior that we desire of our students in our academic programs.
 - We will build stronger connections between our students and alumni.
 - We will behave in a fiscally responsible manner in all aspects of the University operations.
 - We will promote health and wellness throughout the University.
 - We will prepare our graduates for practice in contemporary health care environments.
 - We believe in and will promote a philosophy that the mind, body and spirit are inseparable in all matters of health.
 - We believe that shared governance is essential to the health and vitality of our educational institution; therefore, we will establish mechanisms for collaboration among students, staff, faculty and administration.
 - All clinical curricula will be supported by a basic science foundation, knowing that this is essential for assessment, diagnosis, clinical problem solving, treatment, preventive health and patient education.
 - We value the strength a shared vision imparts that is based on institutional mission, values and principles.

A **GLOBAL** View: Northwestern's Programs

ABOUT THE UNIVERSITY

Northwestern Health Sciences University was organized in 1999 to provide education, research, clinical care and community service in a broad array of natural health care disciplines. Leadership in educational program standards, commitment to a limited enrollment, and emphasis on ethical, successful practice are important characteristics of Northwestern. The University accepts the challenge of extending this leadership role to meet its new and broader mission and purposes.

The University is composed of:

- The Northwestern College of Chiropractic, offering the Doctor of Chiropractic degree;
- The Minnesota College of Acupuncture and Oriental medicine (M.C.A.O.M.) (formerly the Minnesota Institute of Acupuncture and Herbal Studies), offering the Master of Acupuncture and Master of Oriental medicine degrees;
- The School of Undergraduate and Graduate Studies, including the Bachelor of Science program in Human Biology and master's level courses;
- The School of Massage Therapy, offering a professional certificate program;
- The University public clinic system, including five Natural Care Centers, the School of Massage Therapy Teaching Clinic, the Edith Davis Teaching Clinic of M.C.A.O.M. rehabilitation services, radiological consultation services, and clinical laboratory; and
- The University central administration and services, including the Greenawalt Library, University Bookstore, Student Records and Financial Services Office, Office of Admissions, Alumni and Career Services, Communications, Information Technology, Human Resources and Continuing Education Department.

UNIVERSITY FACILITIES

The University's principal facility resides on a 25-acre site in Bloomington, Minnesota. The 230,000-square-foot facility includes nine lecture halls, biological science laboratories, methods laboratories, large library, computer labs, athletic facilities, swimming pool, auditorium, cafeteria, and three clinical environments. The University maintains additional clinical facilities around the Twin Cities metro-politan area.

ABOUT THE MINNESOTA COLLEGE OF ACUPUNCTURE AND ORIENTAL MEDICINE

The Minnesota College of Acupuncture and Oriental Medicine is the only school in the state of Minnesota offering master's degree programs accredited by the Accreditation Commission for Acupuncture and Oriental Medicine. Founded in 1990 as the Minnesota Institute of Acupuncture and Herbal Studies, M.C.A.O.M. has established itself in the Twin Cities area as a premier provider of education and clinical services in the Oriental medical tradition. M.C.A.O.M. student interns provide acupuncture and Oriental medicine services in the Edith Davis Teaching Clinic on the University campus, as well as through health care clinics and community agencies around the metropolitan area.

Our master's degree programs in acupuncture and Oriental medicine emphasize the unified understanding of the mind, body and spirit inherent in Oriental medicine and draw on the rich diversity of Oriental medicine as it has evolved in a variety of traditions. Each system descends from the common root of traditional Chinese medicine and each has valuable gifts to offer the American student. Bringing these traditions together in one setting provides our students with a rich and eclectic learning experience.

M.C.A.O.M. has gathered a multi-national faculty, committed to academic and professional excellence and to teaching the extensive body of knowledge and skills necessary for safe and effective practice. Our graduates have the education and skills necessary to develop a successful practice based on their own personal style.

The curriculum for the Master of Oriental Medicine program provides about 3,200 hours of instruction. The program takes three years to complete. The curriculum includes related studies such as Tui Na, Taijiquan, Qigong herbal studies and introductory Chinese language skills.

The curriculum for the Master of Acupuncture program is similar to that for the Oriental medicine program, but does not include herbal studies. This program includes about 2,600 hours of instruction, taking 3 1/3 years to complete. In addition to the Chinese style of acupuncture, students are introduced to other styles including Japanese, Korean, French-Vietnamese, and Auricular Therapy.

The University admits new acupuncture and Oriental medicine students in January and September of each calendar year. Classes are held Monday through Friday for both programs. The Edith Davis Teaching Clinic is open six days and one evening per week.

ABOUT THE SCHOOL OF MASSAGE THERAPY

Students seeking a rigorous professional massage therapy curriculum will find quality and excellence in Northwestern's newest natural health care program. The massage therapy program at Northwestern Health Sciences University is dedicated to advancing the public's perception of massage therapy and increasing public acceptance of massage therapy as an important health care option. Massage therapists fill an increasingly important role in the health care field. A growing number of medical doctors and doctors of chiropractic are referring patients to massage therapists all around the United States.

This 36 semester credit, 780-hour program emphasizes a solid foundation in the basic sciences, long a Northwestern hallmark; more than 350 hours of hands-on lab experience; and a structured clinical experience within the School of Massage Therapy Teaching Clinic and other community sites. The School of Massage Therapy has assembled outstanding teacher-practitioners, including some of the most experienced and prominent therapists in Minnesota.

The massage therapy program at Northwestern will challenge and inspire students along their path towards becoming a natural health care provider, while instilling the importance of actively managing and maintaining one's own health and wellness. Students are educated in interpersonal communication skills and in the necessity of communicating effectively with clients and the public.

The University admits new massage therapy students in January, May and September of each calendar year. The massage therapy program takes approximately one year to complete. Classes are offered in a unique two day per week format, on Tuesdays and Thursdays. The clinical experience requires a third morning or evening. The School of Massage Therapy Teaching Clinic operates on Mondays, Wednesdays, Fridays and Saturdays.

ABOUT THE COLLEGE OF CHIROPRACTIC

Founded in 1941, Northwestern College of Chiropractic (N.W.C.C.) is a visionary school whose innovative ideas and practices have led, and will continue to lead, generations of chiropractic doctors to the forefront of their profession. Northwestern's basic sciences, clinical, chiropractic and business education is unmatched in preparing students to pass the National Boards and enter clinical practice.

For more than six decades, excellence has been nurtured and inspired at Northwestern College of Chiropractic. The international reputation we have earned has been created in large part by our approach to educating our students.

Northwestern has pioneered an extraordinary and unique clinical system, with five Natural Care Centers, more than 150 community-based private-practice clinics, and final term preceptorship opportunities around the world. The University's public clinic system recorded more than 60,000 patient visits last year, making Northwestern the largest provider of natural health care services in Minnesota.

Northwestern's Doctor of Chiropractic program is a full-time day program consisting of 4,200 credit hours over 10 trimesters. The University admits new chiropractic students in January, May and September of each calendar year. Classes are held Monday through Friday.

Chiropractic students at Northwestern may also complete a Bachelor of Science degree in Human Biology while enrolled in the chiropractic program. Information about the Bachelor of Science degree program is available through the Office of Admissions.

ACCREDITATION, APPROVALS AND LEGAL STATUS

Northwestern Health Sciences University is accredited by the Higher Learning Commission and is a member of the North Central Association (N.C.A.).

N.C.A. was founded in 1895 as a membership organization for educational institutions. The Association is one of six regional institutional accrediting associations in the United States. Through its Commissions it accredits, and thereby grants membership to educational institutions in the 19-state North Central region. The Higher Learning Commission is recognized by the United States Secretary of Education and by the Council on Higher Education Accreditation. Accreditation was extended to Northwestern in 1988, and was renewed in 1993 and 2001. The University's next comprehensive evaluation has been designated for the 2009-2010 academic year.

Higher Learning Commission of the
North Central Association
30 N. LaSalle St., Suite 2400
Chicago, IL 60602

Voice: 800-621-7440
Fax: 301-313-0912
E-mail: info@hlcommission.org
Web: <http://www.hlvcommission.org>

The Doctor of Chiropractic program offered by the University is accredited by the Commission for Accreditation of the Council on Chiropractic Education (C.C.E.). The Council on Chiropractic Education is recognized by the United States Secretary of Education as the official accrediting body for chiropractic education. Northwestern has been a member of C.C.E. since the Commission's inception in 1965. Accreditation was extended to Northwestern in 1971, and renewed in 1974, 1978, 1982, 1985, 1991 and 1998. The next program evaluation is designated for the 2004-2005 academic year.

Council on Chiropractic Education
Commission for Accreditation
8049 N. 85th Way
Scottsdale, AZ 85258-4321

Voice: 480-443-8877
Fax: 480-483-7333
E-mail: cce@cce-usa.org
Web: www.cce-usa.org

The Master of Acupuncture and Master of Oriental Medicine programs offered by the University are accredited by the Accreditation Commission for Acupuncture and Oriental Medicine (A.C.A.O.M.), which is the accrediting agency recognized by the United States Secretary of Education for the approval of programs preparing acupuncture and Oriental medicine practitioners. Program accreditation was extended

in 1999, and the next program evaluation is designated for the 2002-2003 academic year.

Accreditation Commission for
Acupuncture and Oriental Medicine
Maryland Trade Center 3
7501 Greenway Center Drive, Suite 820
Greenbelt, MD 20770

Voice: 301-313-0855
Fax: 301-313-0912
E-mail: acaom1@compuserve.com
Web: www.acaom.org

Northwestern Health Sciences University is registered with the Minnesota Higher Education Services Office. Registration is not an endorsement of the institution. Registration does not mean that credits earned at the institution can be transferred to other institutions or that the quality of the educational programs would meet the standards of every student, educational institution, or employer.

The Veterans Education Unit of the Minnesota Department of Children, Families and Learning approves Northwestern Health Sciences University for veterans' education.

Northwestern Health Sciences University is a not-for-profit corporation under articles and bylaws registered with the Minnesota Department of State. The University is qualified as a 501(c)(3) tax-exempt organization with the Internal Revenue Services of the United States Department of Treasury. 501(c)(3) status is reserved for organizations operating for educational, religious or charitable purposes.

PREPARING

Our Backbone

UNIVERSITY HISTORY

Northwestern Health Sciences University debuted in 1999, bringing together the continuum of natural health care under one educational roof. However, the history of Northwestern's dedication to excellence in education began in 1941 with the founding of Northwestern College of Chiropractic. The College was founded in response to the need existing in the Midwestern states for an educational institution offering a broad program in clinical and chiropractic sciences, built upon a comprehensive background of basic sciences. John B. Wolfe, D.C., was the first president. A postwar influx of veterans raised the total enrollment to 280 by 1949. Northwestern prospered as a school because of the rigorous academic goals it established, and because of the excellent quality of the students and faculty it attracted.

In June of 1949, in order to best advance the interests of the chiropractic profession in Minnesota, the school was reorganized under a nonprofit corporate structure. The new organization obtained as governing members on its Board of Trustees representatives from the Minnesota Chiropractic Association, the Minnesota Chiropractic Foundation, and the public. Dr. Wolfe remained president. The College moved to a campus on Park Avenue in Minneapolis. In 1964, a realistic self-evaluation led to the introduction of the Giant Step Program in 1965. This program provided for a new clinic, a two-year pre-professional requirement for all incoming students, remodeling of the main building, including a library and an all-purpose biology teaching laboratory, and the adoption of objectives that would ensure the development of a quality education program designed for the needs of the profession. Northwestern pioneered the six-year chiropractic academic program, which became a requirement of all chiropractic programs by the Council on Chiropractic Education several years later. By 1973 the continuing growth of the College necessitated the search for a new campus, which led to the Upward Bound development program and purchase, in 1974, of a campus in Saint Paul, located on Mississippi River Boulevard.

Northwestern also pioneered the multiple-clinic concept, community-based clinical education, and the final trimester preceptorship for the training of chiropractic interns within clinics across the United States and in some foreign countries.

Presently Northwestern owns and operates public clinics in Bloomington, Burnsville, Minneapolis, Saint Paul, and Woodbury, Minnesota

The college made a major step forward in its development with the purchase of a large campus located in Bloomington, a beautiful suburb of the Twin Cities in 1983. The campus consists of 25 acres and includes a small lake. The new complex is exceptional throughout in both beauty and quality and is complete with laboratories, lecture halls, classrooms, library, public clinic, auditorium, cafeteria, a gymnasium, and an indoor swimming pool and fitness center.

In 1984 Dr. Wolfe retired after 43 years as president. Donald M. Cassata, Ph.D., was appointed as the second President of Northwestern and served until 1991. Northwestern's third President was John F. Allenburg, D.C. Dr. Allenburg led Northwestern's transition from college to university, and served as President of Northwestern Health Sciences University until his retirement in 2001. Northwestern's fourth and current president is Alfred D. Traina, D.C. Dr. Traina was an associate professor at Northwestern as well as Chair of Clinical Sciences and the Clinical Sciences Residency program until 1989. He has returned to lead Northwestern, drawing upon expertise from his years of practice, education, leadership and service. Northwestern's monumental transition to University status in 1999 was a natural outgrowth of the institution's dedication to being a national leader in natural health care education. Burgeoning interest among health care consumers in natural therapies prompted the College's leadership to begin actively exploring in the late 1990s the possibility of providing additional natural health care degree programs. The Minnesota Institute of Acupuncture and Herbal Studies, founded in 1990 by Edith R. Davis, B.A., L.Ac., Dipl.Ac. (N.C.C.A.O.M.), joined the University in 1999. The Institute has become the Minnesota College of Acupuncture and Oriental Medicine (M.C.A.O.M.), which offers both the Master of Acupuncture and Master of Oriental Medicine degrees. In 2000, the University introduced its School of Massage Therapy. The program is growing, vibrant, and highly successful. The School began public clinical services in 2001, and graduated its first class in the spring of 2002.

The University is dedicated to attaining the highest quality in education, scientific research, and patient care. Northwestern maintains limited enrollment, fosters clinical research, promotes individualized instruction, provides faculty development, and establishes standards for clinical competencies.



The **WORLD** of Northwestern:

Student Life, Student Services, The Campus and The Community

STUDENT LIFE

Orientation

New student orientation is scheduled the week before the first day of classes. Orientation days for the entering terms Fall 2002 through Fall 2004 are shown in the "Academic Calendar" section of this catalog and on the University Student Affairs web site.

Orientation is designed to acquaint new students with each other as well as with the campus. Students begin meeting administration, faculty, staff, and students of the Northwestern community. Certain administrative tasks are also resolved at new student orientation, such as payment of fees, acquisition of books, issuance of ID cards, and similar matters.

Student Conduct

Students at Northwestern Health Sciences University are preparing for health care professions, with all the privileges, responsibilities, confidence, and trust that implies. Northwestern expects each student to exhibit maturity, intelligence, and concern for the rights of others. The University has the right and responsibility to determine the appropriateness of student behavior. Northwestern is committed to cooperation with federal, state, and local authorities in their efforts to enforce existing laws and regulations.

Students are expected to abide by these laws and regulations and to accept responsibility for their own conduct. Violations of federal, state, or local laws may be reported to appropriate outside agencies for disposition in addition to any University disciplinary action.

Student Handbook

A handbook of University rules, regulations, and procedures affecting students is available online and distributed during new student orientation. Additional copies are available in the Student Affairs office, the Library, or from Student Senate class representatives. Disciplinary regulations at the University are set forth in the Student Handbook in order

to give students general notice of prohibited conduct. The regulations should be read broadly and are not designed to define misconduct in exhaustive terms. The University reserves the right to interpret what constitutes a violation of these regulations.

Services of Student Affairs

Peer Tutoring Service

The Peer Tutoring Service is provided by the Student Affairs office to facilitate the learning experience of all students. The service is provided free of charge, and a current list of tutors is available in the Student Affairs office. Tutors can be contacted directly to arrange meeting times. The Student Affairs office recruits tutors from the student body, and selects tutors who have demonstrated academic success and a desire to help others.

Counseling Service

The University provides a counseling service for students who experience academic, emotional, or relationship problems. Counseling services are jointly developed with the student and may include the development of study skills, management of test anxiety, relationship, social, and other educational issues. Counseling is provided on an individual or group basis without charge.

All contacts with the University Counselor are handled confidentially. Unless requested from the student, no reports are made about specific counseling sessions. Exceptions to confidentiality are listed on the University Counseling Handout, available from the Student Affairs office. On occasion, referrals will need to be made to outside services. The University does not cover the cost of the referral care.

Students who feel that a problem is interfering with their academic progress should make an appointment for counseling. Appointments are scheduled through the Student Affairs office.

Qualified persons shall receive reasonable accommodations for access to educational opportunities, programs and activities of Northwestern.

The Student Affairs office is responsible for coordination of programs and services for qualified applicants for admission and enrolled students with disabilities. In order for the University to provide reasonable accommodations for students with disabilities, the following process will be used:

1. The Office of Admissions will notify accepted students of the procedures to receive necessary support services.
2. It is the responsibility of the individual student to inform the Student Affairs office of any special aids or services that he/she may need as the result of a disability.
3. Students must submit directly to the Student Affairs office a written request for accommodations or auxiliary aids. Students may be required to submit medical or other diagnostic documentation of disability and/or limitations. This information will remain confidential to the Student Affairs office, except as permitted by the student expressly for providing support services to that student.
4. As needed, the Student Affairs office will discuss the student's request for accommodation with the student and faculty member or department involved to determine appropriate accommodation. If there is a question about the appropriateness of a student's requested accommodation, the Student Affairs office will inform the student of the University's decision. Northwestern will make every reasonable effort to provide reasonable accommodations. However, Northwestern will not waive requirements that are integral to the education program.
5. Requests must be made in a timely manner. Students must initiate a request for accommodation at least 30 days prior to the beginning of a course/program. Untimely requests may result in delay or denial of accommodation.
6. Complaints concerning the provision of accommodations to disabled students will be handled through the Student Complaint Process specified in the Student Handbook.

STUDENT GOVERNMENT

The Student Senate supports the student body by coordinating student activities, promoting communication within the University community, advocating for student concerns and needs, developing leadership, and setting examples of professional responsibility.

The Student Senate gives recommendations to the faculty and administration concerning all phases of University life and the professional programs. Senate-appointed representatives serve on all University committees. In cooperation with Student Affairs, the Student Senate coordinates the activities of student organizations and clubs.

Social activities of the Senate include picnics, dances, and trips to sporting and cultural events. Various activities are held throughout the year, giving students a chance to socialize and interact. The Senate utilizes the student activity fee in support of these activities and organizations. The Senate includes representatives from each class, and an election of officers is held annually.

STUDENT ORGANIZATIONS

Groups of students who share a common interest, either social or professional, that serves the mission of the University, may organize and seek recognition as a student organization through the Dean of Student Affairs. These approved organizations reflect a wide range of interests, including an array of professional, political, social and recreational groups. Each term the University welcomes a number of distinguished lecturers from a variety of fields, who are sponsored by student organizations. The University recognizes the need to keep informed on a full range of professional issues and encourages participation in these events.

Student organizations provide an opportunity for students to participate and contribute in student leadership and governance. By way of student organizations, the student body enjoys the benefits of those contributions that enhance the quality of life and improve the educational program.

Special interest student organizations plan programs, guest speakers, and events with their corresponding local and national professional organizations. They work to form mutually beneficial, reciprocal relationships between students, practitioners, and the general public by performing community activities. They are an important voice of leadership on issues regarding professional practice and education. Recognized special

interest student organizations include the Canadian Club, Sports Council, Student American Black Chiropractic Association, Student American Chiropractic Association, Student International Chiropractic Association, and Student Minnesota Chiropractic Association.

The University provides and sponsors extracurricular clubs and activities throughout the year including aerobics, hockey, baseball, softball, volleyball, basketball, soccer, and martial arts. The Northwestern Fitness Center is a place for students to work out while on campus. Stairmasters, aerobicycles, an aerobic training room with free weights and exercise machines are just a few highlights of the center's equipment. Students can receive information about joining the Fitness Center in the Student Affairs office.

International Students

The Student Affairs Office provides assistance to international students, chiefly in the area of student status. Student Affairs works with international students to keep forms current in order to ensure student status. This status allows for travel in and out of the United States without difficulty.

University Health Service

A variety of health care options are available to students through the University Health Service located on-campus in the De Rusha Clinical Education Center. Services available include general physical examination, chiropractic assessment and treatment, X-ray and laboratory evaluation, and acupuncture. Care is provided by upper term students under the supervision of faculty clinicians. Basic services provided to students are covered through a health service fee assessed each trimester, and copayments.

INFORMATION TECHNOLOGY

E-mail Policy

Northwestern students are assigned a GroupWise e-mail account for the purpose of receiving official University correspondence. Students are responsible for all information, including attachments, transmitted to them via their e-mail account. E-mail accounts can be accessed at <http://mail.nwhealth.edu> on the World Wide Web. The Information Technology Department provides support for GroupWise e-mail users.

Dial-up Access

Students may request an Internet dial-up account at no charge, through the Information Technology Department. University dial-up accounts provide free Internet access for students residing within the Twin Cities metropolitan area (which includes most of area codes 612, 651, 952, and 763). Students residing outside the Twin Cities metropolitan dialing area will incur long distance charges when using a University dial-up account.

Personal Computer Requirement

Northwestern requires that all students have access to a computer for research, training, independent-study, and institutional services. Students satisfy the access requirement in a variety of ways including the use of computers at the campus library, public libraries, various computer labs, or their own personal computer. Qualifying students may purchase a personal computer through Title IV financial aid. Students selecting this option should consult with a representative in the Student Records and Financial Services office. Students may only exercise this option once during their educational program at Northwestern Health Sciences University.

THE CAMPUS

Bookstore

The University Bookstore offers most of the resources that a student needs for classroom lecture, laboratory and clinical practice.

The Greenawalt Library

The primary purpose of the Greenawalt Library is to provide information resources in support of Northwestern's programs, student and faculty research, continuing education, and clinical practice. The Library is available to all students, faculty, administration, staff, alumni, and natural health care practitioners. Members of the general public may also use the Library resources.

The Greenawalt Library has a specialized collection of more than 13,000 books and bound periodicals. An online library catalog provides easy access to this collection. The Library subscribes to approximately 320 journal titles relating to natural health care, health sciences, and life sciences. Users of the Library have access to a variety of major health science databases. Interlibrary loan services link Northwestern to

local, regional, national, and international networks of libraries, providing students, faculty, and staff access to resources beyond the Library's holdings. The University computer network provides access to the Internet, class-related materials, and standard office software programs.

Professional librarians provide group and individual instruction to students, faculty, or staff when they need assistance in accessing information. The librarians have developed the Library's website, which offers information on library services, as well as research guidance and links to pertinent Internet resources. The site highlights lists of reserve materials, current journal subscriptions, new materials, and an Interlibrary Loan Request form. It also provides a link to the Library's online library catalog.

The Greenawalt Library offers a collection of videos, audiocassettes, slides, and software with the appropriate equipment and facilities for their use. Rooms are available for audiovisual viewing and for group study use. The Library has seating at tables and carrels for quiet study.

The Greenawalt Library is named after Dr. Monte H. Greenawalt and his son, Kent S. Greenawalt, President of Foot Levelers, Inc. Their generous gift made it possible to build this outstanding library facility.

The Wolfe-Harris Center for Clinical Studies

The Wolfe-Harris Center for Clinical Studies, named for Dr. William Harris, one of the University's largest benefactors, and John B. Wolfe, D.C., the first president of Northwestern College of Chiropractic, was constructed in 1991 as part of the 50-year celebration of Northwestern's founding. This 18,000-square-foot facility houses the Research Department offices, a conference room, 25 examination and treatment rooms, X-ray equipment and an adjacent dark room, a large reception area, an intern study room, faculty and staff offices, and a large physical rehabilitation facility.

The Wolfe-Harris Center was created to provide a physical facility for patient care, research and clinical education. In addition to the regular clinic faculty, many of the teaching faculty of the University also maintain practices in the Wolfe-Harris Center. Research conducted in the Wolfe-Harris Center includes randomized clinical trials funded through a variety of sources including the National Institutes of Health, the Health Resources and Services Administration, the Foundation for Chiropractic Education, as well as through funds provided by the University.

De Rusha Clinical Education Center

The J. Lamoine De Rusha Clinical Education Center is a 9,000-square-foot patient care and instructional environment located below the Wolfe-Harris Center for Clinical Studies. The De Rusha Center features 15 treatment rooms, an X-ray laboratory, a student work room equipped with networked PCs, Internet access and printers, and a large multi-purpose room that can be used for lectures, presentations or small group discussion. Several treatment rooms are equipped with equipment for videotaping clinical encounters between students and simulated patients during instructional laboratory sessions and competency examinations. The University Health Service and the School of Massage Therapy Teaching Clinic are housed in the De Rusha Center.

The De Rusha Center is named in honor of J. Lamoine De Rusha, D.C., a long-time professor and Dean Emeritus at Northwestern. Dr. De Rusha committed his life to Northwestern College of Chiropractic and along with his wife, Klara, became an integral part of the campus culture. Dr. De Rusha was recognized internationally for his knowledge of chiropractic and neurology.

THE COMMUNITY

Minnesota and the Twin Cities

Voted the most livable state in the United States, Minnesota offers a wealth of indoor and outdoor activities year-round, whether your interest lies in the wilderness or in the culture of the city.

Get ready to pack up and portage a canoe as you explore Minnesota's breath-taking Boundary Waters Canoe Area Wilderness in northern Minnesota. Camp on the banks of the Mississippi or indulge in a nature hike in one of the dozens of nearby state and county parks. Walk, canoe, sail, ski, skate, or snowmobile at one or more of the not 10,000, but 15,000 famed Minnesota lakes – many located in the greater Twin Cities area.

Northwestern's location places you in the heart of Minneapolis and Saint Paul, a rapidly growing metropolitan area of nearly 3 million people. Minnesota enjoys a broad ethnic diversity in its population, which includes a large number of Native Americans, Hispanic Americans, African Americans and Asian Americans. Historically, Minnesota has had one of the strongest economies nationally, as well as an excellent public school system with one of the highest high school graduation rates in the United States. In the Twin Cities, you'll find a friendly community feeling amid big city opportunities. Your options are limitless.

Take in a game of your favorite professional sport: baseball, football, basketball, hockey, soccer and more. Enjoy excellent music, theater and dance throughout the year. The internationally recognized Guthrie Theater, Ordway Theater or the Theatre de la Jeune Lune (a theater company that divides its time between the Twin Cities and Paris), as well as numerous smaller theaters, are nearby, as is the renowned Children's Theatre and a variety of dance companies. Nightlife in the Twin Cities will catch your interest, offering entertainment from coffeehouses to nightclubs with dancing, from salsa to swing.

Minnesota's theater of seasons caters to the individual adventurer in all of us. With the snow and cold weather, winter also brings great opportunity to get outside. Skating, skiing, sledding, ice fishing, hunting, and snowmobiling are just a few activities available right in the cities. Saint Paul's annual Winter Carnival celebrates the season with parades, ice sculptures and fun cold-weather activities. Minneapolis' annual celebration of the state's water heritage, the mid-summer Aquatennial, is a party of parades, concerts, and made-to-order water events.

Minnesota has for many years been one of the leading states in the country for both traditional and innovative natural health care. It is the home of the Mayo Clinic, the University of Minnesota Hospitals and the Sister Kenny Institute, and was the birthplace of Group Health, one of the nation's earliest HMOs. The Twin Cities area also ranks high in quality-of-life ratings, with a cost of living that is modest in comparison with that of many large cities. The cities are served by a network of buses for public transportation, and freeways provide easy access to different parts of the Twin Cities, with downtown Minneapolis and downtown Saint Paul only 20 minutes apart.

The Minnesota outdoors is hard to avoid. One has a choice of two zoos, picnic grounds, amusement parks, art fairs, music festivals, and a Renaissance Festival. Indoor events beckon too. A number of museums, including a hands-on Science Museum, art centers, and any one of the 22 colleges and universities in the metropolitan area all offer a wealth of choices. Take your pick from hundreds of incredible restaurants serving up dishes from Scandinavia, Thailand, and Greece (just to name a few). And don't forget the internationally recognized Mall of America, the largest shopping mall in the United States, located only minutes from campus.

Whatever season you choose to visit, or whatever activity captures your imagination, you'll find it close at hand in Minnesota.





PIONEERING

Clinic System

PIONEERING CLINIC SYSTEM

The Northwestern Health Sciences University Clinic System is comprised of:

- The Bloomington Natural Care Center, located in the Wolfe-Harris Center for Clinical Studies on the University campus;
- The Highland Natural Care Center, located near Cleveland Avenue and Ford Parkway in Saint Paul;
- The Burnsville Natural Care Center, located near Interstate 35W on Highway 13;
- The Uptown Natural Care Center, located on Hennepin Avenue in Minneapolis;
- The Natural Care Center at Woodwinds, located on the Woodwinds Health Campus in Woodbury;
- The Edith Davis Teaching Clinic of the Minnesota College of Acupuncture and Oriental Medicine, located on the University campus;
- The University Health Service, located in the De Rusha Center for Clinical Education on the University campus;
- The School of Massage Therapy Teaching Clinic, also located in the De Rusha Center
- Northwestern Health Sciences University Clinical Laboratory, located on the University campus;
- Radiological Consultation Services, located on the University campus; and
- The Department of Rehabilitation Services, located on the University campus.

The University Clinic System serves thousands of patients and clients every year, ranging from young to elderly, poor to upper income, and homogeneous to diverse cultures. The Clinic System also provides an excellent opportunity for students to learn the practical side of health care practice.

The Natural Care Center at Woodwinds is a unique integrative health care clinic, located on the Woodwinds Health Campus in Woodbury, Minnesota. A collaboration between HealthEast and Children's Hospitals and Clinics, Woodwinds Health Campus includes a hospital and comprehensive medical services. The Natural Care Center fulfills an important component of Woodwinds' unique mission: to provide seamless integration of health care services for the community, including natural care services. The Natural Care Center provides chiropractic, acupuncture, Oriental medicine, massage therapy, herbology, and naturopathic medical services, and makes available to patients a variety of Western herbal products. Part of the University's mission at the Natural Care Center is to explore integrative care delivery models, in which a spectrum of natural and medical health care providers work collaboratively to provide the best possible comprehensive care for patients. The Natural Care Center represents a significant experiment in health care, a bold clinical move for Northwestern Health Sciences University, and a recognition that natural health care professions are a part of the broader health care system.

In addition to the University clinic system, chiropractic students also serve in community-based internships and preceptorships, under the guidance of associate clinical faculty. University students also serve in selected community and service settings, such as HIV/AIDS service agencies, athletic events, residential hospices, community events, and long-term care facilities. Specialized clinical rotations within inpatient hospital settings are currently under development.

GUIDEPOSTS

For Your Future

CONTINUING EDUCATION DEPARTMENT

Northwestern Health Sciences University recognizes that continuing education is vital to the future of natural health care. Northwestern's continuing education programs promote the advancement and worth of every individual by providing diverse educational opportunities to those who seek them.

The Continuing Education Department sponsors more than 150 continuing education programs each year, including topics in radiology, orthopedics, neurology, sports injuries, acupuncture, family practice, Oriental medicine, rehabilitation, massage therapy, and occupational health. In addition to providing practitioners with applicable and appropriate knowledge, these programs often fulfill licensure renewal requirements established by state licensing authorities.

Where appropriate, Northwestern students also may augment their education by attending continuing education courses on a noncredit basis. Sometimes, continuing education course material can expand the classroom experience. Students who qualify may attend predetermined courses for a nominal charge.

ALUMNI ASSOCIATIONS

After graduation, Northwestern students can look forward to continuing contact with the University through their Alumni Associations. Service to the University and to our alumni is at the heart of the N.W.C.C. and M.C.A.O.M. Alumni Associations operations. Each Association strives to build and foster understanding of the University and to provide and facilitate communication between alumni and their alma mater. The Associations provide a forum that encourages identity and pride in the University. They assist in fundraising and financial support, student recruitment, scholarship support, and are an excellent networking resource for career opportunities. Northwestern Health Sciences University is committed to providing quality programs and services to all alumni. As an alumni pool develops from the School of Massage Therapy, an Alumni Association will be formed there as well.

CAREER SERVICES

The health professional student faces many choices after graduation, but some of the most important involve what type of practice they will have, where they will work, and whom they will work with. Northwestern's Career Services Office serves as a resource center for students, graduates, and other health professionals who might benefit from current information on licensure laws and regulations, professional boards, professional associations, demographic profiles from state populations, practice management and development information, and developing relationships with vendors.

There are a number of opportunities available across the United States and Canada, as well as other countries for doctors of chiropractic, practitioners of Oriental medicine, acupuncturists, and massage therapists. Mentorship relationships with other alumni can be coordinated with Alumni Relations.

Most graduates go directly into clinical practice in a location of their choice, and, coupled with alumni relations, Career Services assists students in helping with their career-related decisions. Current opportunities available in clinical practice are posted, and are also available to be mailed as a monthly newsletter to recent graduates.

OCCUPATIONAL OUTLOOK

Seven out of 10 new jobs that will be created before 2010 are projected for the health services industry (U.S. Department of Labor Monthly Labor Review November 2001, p. 60).

Minnesota College of Acupuncture and Oriental Medicine

Graduates face a marketplace where these professions are enjoying widening acceptance. Employment potential is similar to other places in the U.S. Currently, most practitioners have private practices, while an increasing number are employed or collaborate with community service institutions, major health care agencies and H.M.O.s. Regulation of acupuncturists and Oriental medicine practitioners varies widely, from licensure to regulation to being unregulated. Insurance coverage for acupuncture services is slowly increasing.

Western Medicine Integration

There is a growing interest in integrative health care nationwide. In Minnesota, Hennepin County Medical Center has long offered Chinese medicine treatment by licensed acupuncturists, and has built a national name in addiction treatment and research. Northwestern's groundbreaking Woodwinds Natural Care Center also provides inpatient care services. Acupuncture is widely seen as a profession on the rise, and is emerging as an important health care profession that stands on its own and can integrate with mainstream health care services.

Currently, the U.S. Department of Labor does not track occupational outlook statistics for acupuncturists.

School of Massage Therapy

Massage therapy is a profession that is rapidly maturing. Educational programs have proliferated in recent years across the nation, and with national program accreditation recognition by the U.S. Department of Education on the horizon, an important step for stabilizing and standardizing massage therapy education and practices will soon be taken.

An important trend is the inclusion of massage therapy in many mainstream health care facilities – and their interest in credentialing massage therapy providers from legitimate, academically-oriented programs such as Northwestern's.

Graduates have many opportunities for private solo practice; working with other health care professionals (doctors of chiropractic are the single largest health care profession that employ massage therapists) or working in health care institutions such as clinics and hospitals. Insurance coverage for some conditions and types of injuries is available in certain states, and increasing especially in alliance with medical referrals.

The U.S. Department of Labor notes that massage therapist total job openings 2000-2010 are projected to be 18,000, a 30.4 percent increase in the professional market (U.S. Department of Labor Monthly Labor Review November 2001, p. 69).

Northwestern College of Chiropractic

The U.S. Department of Labor Occupational Outlook 2002-03 states that, for the practice of chiropractic, "Job prospects are expected to be good... Employment of chiropractors is expected to grow faster than the average for all occupations through the year 2010 as consumer demand for

alternative healthcare grows.* The rapidly expanding older population, with their increased likelihood of mechanical and structural problems, also will increase demand."

Doctors of chiropractic have many different practice opportunities, from solo practice to group offices to integrative health care clinics to employment in mainstream health care clinics. With licensure opportunities in all 50 states, Puerto Rico and many countries overseas, chiropractic is a maturing, growing, and widely accepted profession. Insurance coverage is widely available. As professional relationships with medical practitioners improve and lead to increasing collaborative care opportunities, chiropractic is expected to become more mainstream with time.

**Chiropractic total job openings 2000-2010 are projected to be 21,000, a 23 percent increase in professional market (p. 68).*

INSTITUTIONAL ADVANCEMENT

At Northwestern we believe that our relationship begins when you first contact us, and continues for your whole life. Advancement activities include: working to enhance student's educational experiences through student government and clubs; providing effective business and career development support for personal and professional success; developing learning opportunities for post-graduate education; developing alumni activities to stay connected with your classmates and professional peers; and building relationships with alumni who see the importance of demonstrating their professional citizenship by actively supporting Northwestern.

CHARTING

Your Financial Path

GENERAL POLICY

Northwestern Health Sciences University is a private, non-profit institution that derives its financial resources from alumni gifts, private foundation grants, clinic fees, student tuition, and the benevolence of the University's friends.

All tuition, fees, and other amounts owed are due and payable the end of the third week of class. After the completion of the third week of class, if tuition has not been paid or if arrangements for payment have not been made with the Student Records & Financial Services Office, a \$150 late fee will be assessed and registration for that trimester will be cancelled. To be reinstated, the student must pay tuition in full or make payment arrangements with the Accounting Office.

Students who have not paid tuition by the end of the third week of class are to sign an interest-bearing note until the tuition has been paid. This will be required in the following cases:

1. If a student has not satisfactorily completed and filed all financial aid applications prior to the first day of class (except first term students). (NOTE: Satisfactory completion and filing of financial aid applications is defined as all paperwork having been submitted for review to the Financial Aid Office, and the office has determined that the applications are complete and ready for submission, and have been submitted to the appropriate lender.)
2. If a student with special tuition agreement has not paid in full the portion of tuition due by the end of the third week of class.
3. If a student has not received financial aid, is not able to pay tuition by the end of the third week of class, and has been approved for an extension of time in which to pay the tuition.

An interest-bearing note begins accruing interest on the Monday following the Friday of the third week of class. It is the responsibility of the student to report to the Student Records & Financial Services Office to sign the note. Failure to do so at the required time will result in the assessment of

a \$150 late fee and possible permanent cancellation of that student's registration and dismissal from school.

All tuition, fees, and other amounts owed by a student must be paid in full, before registration begins for the subsequent trimester, or he/she will not be allowed to register. Any student with a balance due at the time of graduation will not receive a diploma, and copies of official transcripts will be withheld until the balance is paid in full.

Tuition and fees are subject to change at any time. As a general rule, costs will be adjusted once a year to be in effect for fall, winter, and summer terms of the entire academic year. New tuition and fee rates are announced in the summer prior to the beginning of the upcoming academic year. To find out current tuition and fees for all programs at Northwestern, contact Student Records and Financial Services at 800-888-4777.

AUDIT POLICY

A student who registers as an auditor should request audit status at registration. As an auditor you will enroll in, pay tuition and fees for, and attend classes but not complete assignments or take examinations. The symbol "AU" will automatically appear in the grade column of the student's transcript. The fee for such a course is the same as for credit. Audited courses may not be used for credit, will not transfer to other colleges and do not meet the requirements for a degree. Financial aid is not available for audited courses.

Prerequisite requirements for audited courses must be completed. Audits are allowed on a space-available basis with priority given to full credit registrants. Colleges may have additional requirements to meet prior to registering as an auditor. Prior to auditing it is necessary to have approval from the appropriate course/program administrator as directed by the registrar. This policy does not include students who are encouraged or required to audit a course for the purpose of remediation or mitigating academic deficiencies.

WITHDRAWAL POLICY

The University recognizes that a decision to withdraw for any reason, financial or personal, is a difficult one. It is advisable for a student to share thoughts about potential withdrawal with their program office and the Office of Student Affairs as early as possible so that the University may offer counsel on different alternatives and the student may derive maximum benefit under the University's refund policy.

Students may officially withdraw from the University by personally informing the Registrar in writing of their intentions. The Registrar is located in the Student Records and Financial Services Office. The date of withdrawal will be noted as the date on which the student notifies the Registrar.

If at the time of withdrawal the student's payments for the trimester exceed the amount of liability, he or she will be entitled to a refund of the excess; if the student's payments are less than the liability, the balance will be due and payable as of that date.

Students withdrawing from the University will be considered in good standing, unless they have failed to clear up any probation notation on their record or failed to pay a tuition and fees liability. Students in good standing may reenter the University upon application for readmission. Students not in good academic standing may be required to complete conditions imposed by the Academic Standards Committee. Students not in good financial standing are required to clear their financial obligations prior to readmission.

RETURN OF TITLE IV FUNDS POLICY

The Return of Funds Policy applies to all students who have or could have been disbursed federal funds. In accordance with federal regulations, the institution and the student are required to return unearned portions of Title IV assistance (federal grants and/or federal student loans). This return of unearned funds only applies to students who have completely withdrawn. The return of funds is based upon the percentage of time the student was at the institution. The percentage of time completed is determined by dividing the number of days prior to complete withdraw by the total days of the trimester. The earned percentage (rounded) is then subtracted from 100 percent, which then gives the unearned percentage. The unearned percentage is then multiplied times the total disbursement of federal assistance, which calculates the total funds that need to be returned to the Federal Government. This unearned amount is then evaluated by the institution (Financial Aid Office and Accounting) to determine how

much must be returned to the Federal Government. If a student withdraws after 60 percent of the trimester has been completed, no funds will be returned.

Return of Title IV funds to the Federal Government will be in the following order:

- Unsubsidized Stafford Loan
- Subsidized Stafford Loan
- Federal Perkins Loan
- PLUS Loan
- Federal PELL Grant
- Federal SEOG

Failure of the student to repay the Federal Government could jeopardize the student's eligibility for future financial assistance at Northwestern and other institutions. Failure to repay the institution could jeopardize the student's eligibility to return to the school and/or receive official academic transcripts.

Note: Refunds may also be required for State of Minnesota financial aid programs. Return of Title IV funds calculations will be done first before Northwestern's Refund Policy.

NORTHWESTERN HEALTH SERVICES UNIVERSITY (N.W.H.S.U.) REFUND POLICY

The Institutional Refund Policy applies to all continuing students (new students are subject to the refund policy except the \$300 tuition deposit). This Refund Policy takes into consideration the substantial financial commitment made by the University for the education of its students, including the employment of faculty, maintenance of laboratories, clinics, physical plant, and administrative operations. These commitments are made in advance of each trimester, and withdrawals leave vacancies to be filled until the next matriculation. Withdrawals will be calculated from the date on which the student officially withdraws, except in the instance of an incapacitating accident, illness, or death.

- 100 percent of tuition charges will be refunded if the student withdraws on or before the first day of classes.
- 90 percent of tuition charges will be refunded if the student withdraws after the first day of class but before 10 percent (in time) of the enrollment period.
- 50 percent of tuition charges will be refunded if the student withdraws during the time between 10 percent (in time) and 25 percent (in time) of the enrollment period.

- 25 percent of tuition charges will be refunded if the student withdraws during the time between the end of the first 25 percent (in time) and the end of the first 50 percent (in time) of the enrollment period.
- No refund will be granted, if withdrawal is made after 50 percent of the enrollment period has passed.
- All percentages will be rounded.

Example: If an enrollment period is 105 days and a student withdraws on the 52nd day (49.52 percent of the enrollment period) or the 53rd day (50.47 percent of enrollment period), the student would get a 25 percent tuition refund. However, a student who withdraws on the 54th day or later, would not receive a refund. When a student is entitled to a refund, the funds will be given to the student unless the institution has been required to return an unearned portion of Federal Title IV funds to the Federal Government. If the refund is more than which is to be returned, then the student will be given the remaining portion. If the refund is less than which is to be returned to the Federal Government, then the student will be billed for the difference (see "The Return of Title IV Funds Policy" in this section).

FINANCIAL AID PROGRAMS

Northwestern, online at www.nwhealth.edu, provides a wide variety of financial aid programs available to assist its students in meeting their cost of attendance while attending N.W.H.S.U. These funds are available through federal, state, institutional, and private sources. Only those students who have been accepted to N.W.H.S.U., and have submitted their tuition deposit, will be considered for financial aid assistance. These students will be mailed a financial aid packet (time line determined by the financial aid office) with all necessary applications and forms to be completed. For more detailed information, just follow the "financial aid links" through our web site noted above.

For financial aid purposes, those students fully accepted into the Chiropractic or Acupuncture/Oriental Medicine programs are considered graduate level. Those students fully accepted into the Massage Therapy program are considered undergraduate level.

Available Financial Aid for the programs offered at N.W.H.S.U.

**Chiropractic:* Federal limits for "fully accepted" graduate health professions.

***Acupuncture/Oriental Medicine:* Federal limits for undergraduate/graduate students.

Massage Therapy: State of Minnesota Grants and Self Loans, and alternative loans.

Important notes: *There may be variations if you are not fully accepted and taking prerequisite course work (*undergraduate*). **If you have a four-year degree upon entering the acupuncture/Oriental medicine program at Northwestern you will be considered a graduate student for financial aid purposes. If you do not have a four-year degree, you may be considered an undergraduate student until entering trimester 3, at which time your status will change to a graduate student.

FINANCIAL AID AND ELIGIBILITY

Students may receive financial aid (see limitations under Financial Aid Programs) if they are in good academic standing with the institution. Students are eligible for financial aid during those terms when they are enrolled above half-time, in credit hours (as determined by the Registrar's Office).

Enrollment Status Definitions

**Chiropractic:* full-time (15 credits or more); three-quarter time (10 to 14.99 credits); half-time (7.5 to 9.99 credits); less than half-time (7.49 or less credits)

Acupuncture/Oriental medicine: full-time (9 credits or more); three-quarter time (7 to 8.99 credits); half-time (5 to 6.99 credits); less than half-time (4.99 or less)

Massage Therapy: full-time (12 credits or more); three-quarter time (10 to 11.99 credits); half-time (8 to 9.99 credits); less than half-time (7.99 or less)

***Important note:** Students who are classified as T10 are full-time per school standards with 10 or more credit hours, others will be prorated.

Financial assistance will be adjusted for each trimester of enrollment according to the student's enrollment status and the regulations that govern each program. Students who have been suspended from financial aid for failing to make satisfactory academic progress, who have been dismissed from the institution, or withdrawn, are not eligible for federal, state, and/or certain alternative financial aid.

FINANCIAL AID AND SATISFACTORY ACADEMIC PROGRESS

The Higher Education Amendments that govern Title IV Financial Assistance Programs state that “a student shall be entitled to receive federal student assistance benefits only if that student is maintaining progress in the course of study he/she is pursuing, according to the standards and practices of the institution.” Northwestern’s Policy of Satisfactory Academic Progress requires a student to meet both a Scholastic Standard (qualitative-grade requirement), and a Program Standard (quantitative-work completed). Supportive services are available at Northwestern to help ensure a student’s scholastic success; information about these services is available in the Student Counseling Center. An aid-recipient’s Satisfactory Academic Progress will be monitored at the end of each grading period to establish the student’s eligibility to continue receiving financial aid.

Satisfactory Academic Progress Policy for receiving financial aid in programs offered at N.W.H.S.U.

Chiropractic:

- Maintaining a minimum 2.0 G.P.A. on all work attempted or academic standing consistent with graduation requirements; that is, to be making satisfactory progress toward a Doctor of Chiropractic Degree and/or Bachelor of Science Degree in Human Biology.
- Completing the minimum trimester status requirements for which assistance was received.
- The student may not receive federal financial aid beyond 150 percent of the normal time to complete the Doctor of Chiropractic Degree and/or Bachelors of Science in Human Biology Degree. Therefore, a student may receive financial aid during periods of full-time enrollment equivalent to 15 trimesters. This period of time includes all periods of enrollment at Northwestern whether aid was received or not.

Acupuncture and Oriental Medicine:

- Students must pass all required courses with a grade of 75 percent. Students may repeat failed or “no credit” courses.
- For elective courses, no credit is given without a passing grade, but a failed elective need not be repeated. Other courses may be substituted to make up the total credit requirement.

- Full-time students must pass 75 percent of enrolled courses each year.
- No credit is given for withdrawals or failures.
- Credit for an Incomplete is granted only on completion of the specified missing parts, within the time frame provided by the instructor.
- Clinical performance is evaluated each term. To pass, the average score must be appropriate for the intern’s stage of progress in the clinic. Particular areas with scores below expectation will have to be re-mediated.
- 100 percent clinical attendance is required. All missed hours must be made up.
- Students must pass clinical competency exams prior to beginning supervised clinical practice, and at various stages throughout clinic.

Massage Therapy:

- Students must maintain a cumulative grade point average (G.P.A.) of 2.00 (“C”). Satisfactory progress is evaluated at the conclusion of each academic term.

FINANCIAL AID COUNSELING

Entrance, Midstream, and Exit Counseling are required for students who have or will obtain loans while attending Northwestern. Loan counseling is particularly important because new students often have little or no experience with repayment and managing debt (individual financial aid portfolio). A school must conduct “initial” or Entrance Counseling before releasing the first disbursement of Stafford and Perkins (online at www.mapping-your-future.org). Midstream Counseling is provided halfway through the graduate programs so that you are aware of your up-to-date aggregate total and monthly payments. The emphasis for Exit Counseling shifts to more specific information about loan repayment and debt-management (online at www.mapping-your-future.org).

FEDERAL STUDENT AID AT A GLANCE

Federal Student Financial Aid (S.F.A.), www.ed.gov_info/SFA/StudentGuide, is assistance for students enrolled in at least half-time in participating schools. It helps to cover school expenses, including tuition and fees, room and board, books and supplies, and transportation. Most aid is need-based, and the three types of aid are grants, loans and work-study. All

students, who wish to be considered for Student Financial Aid, must complete a Free Application for Federal Student Aid (F.A.F.S.A.) (available online at www.fafsa.ed.gov). You may also want to electronically sign your F.A.F.S.A. by getting a personalized pin number (available online at www.pin.ed.gov). Go to www.ed.gov/prog_info/SFA/FAFSA for help in completing the F.A.F.S.A.

FEDERAL PELL GRANT (PELL)

The Federal PELL Grant is gift money available to those eligible students who are considered undergraduate. For those students who are eligible, it should be the first form of financial aid investigated. In order to determine eligibility, the Free Application for Federal Student Aid (F.A.F.S.A.) should be completed and mailed for processing. At your request, the processor will forward that information to the U.S. Department of Education, which determines final eligibility. This should be done before applications for student loans are made. Federal PELL Grant amounts are determined by the Federal Government and certified by Student Records and Financial Services.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (F.S.E.O.G.)

F.S.E.O.G. is a campus-based award of federal gift money given to eligible undergraduate students. To qualify for this award, a student must be eligible for a Federal PELL Grant and still have additional financial need. U.S. Federal guidelines and institutional policies determine amounts.

FEDERAL PERKINS LOAN

A Federal Perkins loan is a low-interest (5 percent) loan for students with exceptional financial need (undergraduate or graduate). Eligibility for the Federal Perkins Loan, as determined by the financial aid office, is considered when students apply for other forms of federal financial aid. The financial aid office along with funding levels from the Department of Education also determines the standard Federal Perkins Loan amount, awarded per academic year. Principal and interest are deferred until nine months after graduation.

FEDERAL FAMILY EDUCATION LOAN PROGRAM (F.F.E.L.P.)

The F.F.E.L.P. program consists of the Subsidized Stafford, Unsubsidized Stafford and PLUS loans. The Federal Stafford Loan Program (subsidized and/or unsubsidized) was established to provide long-term, variable low-interest loans to eligible students in post-secondary education, while the student is attending school at least half-time.

1. Graduate Students (*Chiropractic*) – May be eligible to borrow up to the cost of education (8 months). Up to \$8,500 may be used for the subsidized Stafford Loan (*need based*) and the remaining on unsubsidized Stafford Loan, or all unsubsidized.
2. Graduate Students (*Acupuncture and Oriental Medicine*) – May be eligible to borrow up to \$8,500 per academic year (8 months) for a subsidized Stafford Loan (*need based*) and up to \$10,000 for unsubsidized Stafford Loan, or all \$18,500 in unsubsidized.
3. Undergraduate Students – Students taking prerequisites for graduate study may receive loans at the fifth year undergraduate level (\$5,500/\$5,000).

The total outstanding Federal Stafford Loan debt for graduate or professional students in an eligible health profession (*Chiropractic only*) is \$189,125 (\$65,500 in subsidized and \$123,625 in unsubsidized). The graduate debt limit includes any Federal Stafford Loans received as an undergraduate student.

NOTE: The amounts given are the maximums a student can borrow. However, students cannot borrow more than the cost of education (refer to Federal Student Guide), as determined by Northwestern, minus any other financial aid.

FEDERAL WORK STUDY (F.W.S.)

This is a federally-funded, campus-based work program that provides jobs on campus for financially-eligible students to work up to an average of 20 hours per week. The College provides positions for students in the library, admissions, building maintenance, and laboratory assistance, among others. To determine your Work-Study eligibility, you must stop in the Student Records and Financial Services area. All F.W.S. funds are subject to I.R.S. tax rules and regulations. The Human Resources Department determines wages.

Northwestern also participates in the Community Service Program, which encourages students to get involved in community service activities. Opportunities include Master Aquatics

Program (Rehabilitation Center), Clinic Receptionist (four locations), and literacy or reading programs (coordinated with Student Affairs).

STUDENT ELIGIBILITY

Effective July 1, 2000, a student may be suspended from financial aid eligibility for drug-related offenses.

MINNESOTA HIGHER EDUCATION SERVICES OFFICE (M.H.E.S.O.)

Minnesota State Grant Program (M.S.G.P.) and Student Self Loan Fund Program (S.E.L.F.):

The M.S.G.P. provides undergraduate students with assistance in meeting the cost of attendance at eligible Minnesota public and private post-secondary institutions of their choice. In order to receive an award, the student must demonstrate financial need; be a Minnesota resident attending an eligible Minnesota institution; be making satisfactory academic progress; and meet any federal and state requirements.

The S.E.L.F. loan program helps students who need assistance in paying for education beyond high school. To be eligible for the S.E.L.F. program, a student must be either a:

- Minnesota resident who is enrolled at least half-time in a certificate, associate, baccalaureate, or graduate degree program at an eligible school; or
- Non-Minnesota resident who is enrolled at least half-time in a certificate, associate, baccalaureate, or graduate degree program at an eligible school located in Minnesota

To be eligible for a S.E.L.F. loan, the student must have a credit worthy co-signer, and may not be delinquent or in default on a S.E.L.F. or any other outstanding student loan. You must also complete S.E.L.F. loan counseling (www.mheso.state.mn.us/self/self.cfm).

The State of Minnesota, www.mheso.state.mn.us, requires the completion of the Free Application for Federal Student Aid (F.A.F.S.A.) for determining the eligibility of grants and S.E.L.F. loans.

ALTERNATIVE/PRIVATE LOAN PROGRAMS

There are alternative loans available (*including those for international students*). There are however, limitations, so contact the financial aid office for more information.

SCHOLARSHIPS

Northwestern offers a wide variety of institutional scholarships, endowments, and funds from outside agencies. These scholarships are awarded using several criteria including academic standing, financial need, extracurricular activities, and others.

For example: The Northwestern, United States, International, and minority scholarships and grants are intended to encourage geographical, cultural, and socioeconomic diversity at Northwestern. Please note that the availability of funds is based on contributions, interest bearing accounts, and institutional funding. Actual amounts may vary.

You may contact the Student Records and Financial Services for more information.

STANDARD REPAYMENT, EXTENDED REPAYMENT AND CONSOLIDATION OPTIONS

Payments begin six months after the student withdraws, graduates, drops below half-time enrollment or is no longer enrolled. Minimum monthly payment is \$50. Generally the loan must be repaid within 10 years. Consolidation combines all of your federal student loans into a single, new loan (i.e. level, graduated, or income-sensitive repayment options are available). There are no application fees and flexible repayment options to suit your current financial situation. When your income increases, you can always make additional payments towards principal to help reduce interest over the long run. There are no prepayment penalties. Extended repayment is also available.

MANAGING YOUR FINANCIAL AID

Student loan indebtedness can be burdensome. How much you know about your student loan status is important. Do you know how much debt is too much? Management of your financial aid requires that you:

- Apply only for the aid you need so that you can live like a student now and not later.

- Keep records of income, expenses, and money borrowed.
- Complete all forms neatly, thoroughly, and timely.
- Read everything sent to you by the lender, your service, and Northwestern.
- Become familiar with repayment terms of the loans.
- Take advantage of the access to web site locations.
- Do not default on your student loans, as there are serious consequences.

Frequently Requested Telephone Numbers

- General information about the federal student financial aid programs: 800-433-3243
- Free Application for Federal Student Aid (F.A.F.S.A. on the Web) assistance: 800-801-0576

Useful Web Sites

- U.S. Department of Education's "Financial Aid for Students Home Page": www.ed.gov/studentaid
- Northwestern Health Sciences University home page: www.nwhealth.edu

For further details on any programs, contact the Student Records and Financial Services Office at 800-888-4777, ext. 387. Please note that financial aid and related processing are subject to change.





The Power of our **PEOPLE**

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> D.C., Northwestern College of Chiropractic, 1985

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John F. Allenburg, D.C., D.A.B.C.O., *President Emeritus*
Edith R. Davis, B.A., L.Ac., Dipl.Ac. (N.C.C.A.O.M.),
Faculty Emerita and M.C.A.O.M. Founder
J. Lamoine De Rusha, D.C., F.I.C.C., *Dean Emeritus* *
Charles H. Esch, D.C., *Professor Emeritus*
John B. Wolfe, D.C., *President Emeritus* *

* deceased

FACULTY

Paula Allenburg-Anderson, *Assistant Professor* (2001)
➤ D.C., Northwestern College of Chiropractic, 1987
➤ B.S., Northwestern College of Chiropractic, 1985

James J. Amundson, *Associate Professor* (1993)
➤ M.Ed., College of St. Scholastica, 2000
➤ C.S.C.S., 1996
➤ D.C., Northwestern College of Chiropractic, 1988
➤ B.S., Bemidji State University, 1973

David C. Arnold, *Assistant Professor* (2001)
➤ D.C., Northwestern College of Chiropractic, 1987
➤ B.S., Northwestern College of Chiropractic, 1985

Julia D. Bartlett, *Assistant Professor* (1996)
➤ D.C., Northwestern College of Chiropractic, 1989
➤ B.S., Northwestern Health Sciences University, 2002

Steven R. Beck, *Lecturer* (1973)
➤ D.C., Northwestern College of Chiropractic, 1971

Thomas Bergmann, *Professor* (1981)
➤ D.C., National College of Chiropractic, 1977
➤ B.S., Northern Illinois University, 1969

Paula Bergs, *Lecturer* (2001)
➤ B.S., University of Minnesota, 1984
➤ B.A., Concordia College, 1982

Krista R. Boline, *Assistant Professor* (2000)
➤ D.C., Northwestern College of Chiropractic, 1993
➤ B.A., Concordia College (MN), 1990

Linda J. Bowers, *Professor* (1981)
➤ D.A.C.A.N., 1992
➤ D.A.C.B.N., 1988
➤ D.A.B.C.I., 1987
➤ D.A.B.C.O., 1983
➤ D.C., Northwestern College of Chiropractic, 1981
➤ Certified M.L.T. (A.S.C.P.), 1978
➤ B.S., University of Minnesota, 1978

Gert Bronfort, *Professor* (1988)
➤ Ph.D., Vrije University of Amsterdam, 1997
➤ D.C., Canadian Memorial Chiropractic College, 1968

Beth Burgan, *Assistant Professor* (2001)
➤ Certificate, Sports Massage, 1994
➤ N.C.T.M.B., 1992
➤ Certificate, NeuroMuscular Therapist, 1991
➤ Certificate, Northern Lights School of Massage Therapy, 1988
➤ M.F.A., M.A., Kent State University, 1976

Daniel R. Conway, *Assistant Professor* (1997)
➤ D.C., Northwestern College of Chiropractic, 1997
➤ B.S., Northwestern College of Chiropractic, 1997

P. Thomas Davis, *Associate Professor* (1989)
➤ D.A.C.B.O.H., 1993
➤ D.C., Palmer College of Chiropractic, 1977
➤ M.U.P., University of Illinois, 1966
➤ B.A., Southern Illinois University, 1960

Renee M. DeVries, *Associate Professor* (1993)
➤ D.A.C.B.R., 1996
➤ D.C., Northwestern College of Chiropractic, 1989
➤ B.S., Northwestern College of Chiropractic, 1989

Donald L. Eggebrecht, *Associate Professor* (1988)
➤ D.A.B.C.O., 1991
➤ D.C., Northwestern College of Chiropractic, 1986
➤ B.A., University of Minnesota, 1978

William C. Elkington, *Professor* (1985)
➤ D.C., Northwestern College of Chiropractic, 1984
➤ B.A., Hamline College (MN), 1974

Mikhail G. Epshteyn, *Lecturer* (2002)
➤ Pharm.D., University of Minnesota, 2000

Terry A. Erickson, *Associate Professor* (1994)
➤ D.C., Palmer College of Chiropractic, 1988
➤ B.S., Northwestern Health Sciences University, 2002

Roni L. Evans, *Associate Professor* (1993)
➤ D.C., Northwestern College of Chiropractic, 1993
➤ M.S., University of Minnesota, 2001

Jeffrey A. Ewald, *Associate Professor* (1983)
➤ D.A.B.C.O., 1991
➤ D.C., Northwestern College of Chiropractic, 1981
➤ B.A., University of Minnesota, 1974

Bradley A. Finer, *Associate Professor* (1985)
➤ D.C., Northwestern College of Chiropractic, 1982

Rachel J. Fredericks Franklin, *Assistant Professor* (1999)
➤ D.C., Northwestern College of Chiropractic, 1998
➤ B.S., College of Saint Benedict (MN)

- Thomas D. Frick, *Associate Professor (1989)*
- Ph.D., University of Illinois, 1980
 - M.S., University of Illinois, 1974
- Barbara J. Gosse, *Associate Clinic Faculty (1999)*
- M.S.O.M., Southwest Acupuncture College (NM), 1993
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Christopher Hafner, *Associate Clinic Faculty (2001)*
- B.A., University of Minnesota 1986
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Rosemary A. Haywood, *Associate Professor (1990)*
- L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- William J. Hejny, *Assistant Professor (1999)*
- DC, Northwestern College of Chiropractic, 1982
- Richard A. Hills, *Assistant Professor (1996)*
- D.C., Northwestern College of Chiropractic, 1993
 - B.S., California State University, 1985
- Joanie Holst, *Instructor (2001)*
- N.C.T.M.B, 1992
 - Certificate, NeuroMuscular Therapist, 1991
 - Certificate, Northern Lights School of Massage Therapy, 1990
 - B.S., Mankato State University, 1979
- Norman M. Horns, *Associate Professor (1995)*
- B.C.A.C.P., 1963
 - M.D., University of Minnesota, 1957
 - B.S., University of Minnesota, 1955
- Amy L. Horton, *Chiropractic Resident (2001)*
- D.C., Northwestern Health Sciences University, 2000
 - C.S.C.S., 1997
 - B.A., Carleton College (MN), 1996
- Xiaoyan Hu, *Associate Professor (2000)*
- B.Med. (China), Hubei Traditional Chinese Medical School, 1983
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- James R. Hulbert, *Assistant Professor (1994)*
- Ph.D., Iowa State University, 1985
 - M.S., Iowa State University, 1982
 - M.A., University of Iowa, 1975
 - B.A., University of Iowa, 1967
- Lynne C. Hvidsten, *Associate Professor (1994)*
- D.C., Northwestern College of Chiropractic, 1986
 - B.S., Northwestern College of Chiropractic, 1995
- Ann Ivey, *Assistant Professor (1986)*
- D.C., Northwestern College of Chiropractic, 1983
- Yongping Jiang, *Associate Professor (2000)*
- Ph.D. (China), Shandong University of Traditional Chinese Medicine, 1995
 - M.Med (China), Shandong University of Traditional Chinese Medicine, 1992
 - B.Med (China), Shandong University of Traditional Chinese Medicine, 1983
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Gary D. Johnsen, *Lecturer (1995)*
- M.A., St. Mary's (MN), 1986
 - B.A., Canadian Bible College, 1982
- Walter L. Johnson, *Associate Professor (1983)*
- Ph.D., University of Minnesota, 1972
 - M.S., University of Minnesota, 1969
 - B.A., Macalester College, 1963
- Kevin E. Kalb, *Assistant Professor (1985)*
- D.C., Northwestern College of Chiropractic, 1983
 - B.S., Clarkson College of Technology (NY), 1970
- Andrew S. Klein, *Lecturer (1995)*
- D.A.C.B.S.P., Northwestern College of Chiropractic, 1993
 - D.C., New York Chiropractic College, 1987
 - M.S. in Ed., Queens College (NY), 1985
- Link P. Larson, *Associate Professor (1993)*
- C.C.S.T., 1998
 - D.C., Northwestern College of Chiropractic, 1986
 - B.S., St. Mary's College, 1975
- Zhaoping Li, *Associate Clinic Faculty (2000)*
- L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Kathy J. Lind, *Instructor (1993)*
- A.A., Fergus Falls Community College, 1980
 - Certified M.L.T. (A.S.C.P.), 1980
- Charles A. Lininger, *Instructor (2000)*
- L.Ac.
 - B.A., Michigan State University, (1970)
 - Dipl.Ac. (N.C.C.A.O.M.)

- Wei Liu, *Associate Professor (2000)*
- B.Med (China), Tianjin College of Traditional Chinese Medicine, 1988
 - L.Ac.
 - Dipl.Ac.(N.C.C.A.O.M.)
- Huan Ma, *Assistant Professor (2001)*
- M.Med (China), Tianjin College of Traditional Chinese Medicine, 2000
 - B.Med (China), Tianjin College of Traditional Chinese Medicine, 1993
- Anita L. Manne, *Associate Professor (1985)*
- D.A.C.B.R., 1985
 - D.C., Logan College of Chiropractic, 1981
 - B.S., Logan College of Chiropractic, 1979
- James E. McDonald, *Associate Professor (1977)*
- M.B.A., University of St. Thomas, 1988
 - M.S., California Polytechnic State University, 1977
 - B.S., California Polytechnic State University, 1972
- Mark S. McKenzie, *Associate Clinic Faculty (2001)*
- M.OM, Northwestern Health Sciences University, 2002
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Karen J. McManus, *Assistant Professor (2000)*
- D.C., Northwestern College of Chiropractic, 1996
 - B.S., Northwestern Health Sciences University, 2002
 - B.Mus., University of Massachusetts, 1988
- Timothy J. Mick, *Associate Professor (1989)*
- D.A.C.B.R., 1989
 - D.C., Northwestern College of Chiropractic, 1986
- Warren L. Moe, *Associate Professor (1982)*
- D.C., Los Angeles College of Chiropractic, 1980
 - B.S., Los Angeles College of Chiropractic, 1980
 - A.A., Waldorf College, 1970
- Sanya S. Mortenson-Swanson, *Assistant Professor (1998)*
- D.C., Northwestern College of Chiropractic, 1995
 - B.S., Northwestern College of Chiropractic, 1995
- Mai H. Nguyen, *Assistant Professor (2001)*
- M.D. (Russia), I.M. Sechenow Medical School, 1990
 - L.Ac.
- Amy L. Nystrom, *Associate Clinic Faculty (2001)*
- L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Paul J. Osterbauer, *Associate Professor (1998)*
- M.P.H., University of Washington, 1993
 - D.C., Northwestern College of Chiropractic, 1986
 - B.S., Northwestern College of Chiropractic, 1986
- Deborah F. Owen, *Associate Clinic Faculty (2000)*
- M.Ac., New England School of Acupuncture, 2000
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Tolu A. Oyelowo-Lee, *Associate Professor (1995)*
- D.C., Northwestern College of Chiropractic, 1989
 - B.A., University of Minnesota, 1983
- Anne M. Packard-Spicer, *Associate Professor (1991)*
- D.C., Northwestern College of Chiropractic, 1991
 - B.S., College of Saint Benedict (MN), 1983
- Laverne S. Paulin, *Lecturer (1955)*
- A.L.A., University of Minnesota, 1957
 - D.C., Northwestern College of Chiropractic, 1953
- Rebecca A. Peterson, *Instructor (1997)*
- M.L.A., St. Paul Tech, 1975
- Joel J. Pins, *Assistant Professor (1997)*
- Ph.D., University of Minnesota, 1997
 - M.P.H., University of Minnesota, 1996
 - M.S., University of Minnesota, 1995
- John Pirog, *Associate Professor (2000)*
- M.S.O.M., Midwest Center for the Study of Oriental Medicine (IL), 1999
 - L.Ac.
 - Dipl.Ac. (N.C.C.A.O.M.)
- Michael B. Porter, *Instructor (1997)*
- M.S. in Ed., University of Kentucky, 1979
 - B.S., University of Wisconsin-Oshkosh, 1977
- Michael J. Przeslawski, *Associate Professor (1984)*
- D.C., Northwestern College of Chiropractic, 1983
 - B.S., Eastern Michigan University, 1976
- Denise Radcliffe, *Assistant Professor (2001)*
- N.C.T.M.B., 1993
 - M.S., Ohio University, 1988
 - B.S., University of Rio Grande (Ohio), 1980
- Jeffrey A. Rich, *Assistant Professor (1998)*
- D.C., Northwestern College of Chiropractic, 1996
 - B.S., Northwestern College of Chiropractic, 1995

Jane E. Richardson, *Assistant Professor (1982)*

- M.Ed., University of Minnesota, 1993
- B.S., University of Minnesota, 1972

Charles E. Sawyer, *Professor (1977)*

- D.A.C.B.N., 1987
- D.C., Northwestern College of Chiropractic, 1977
- B.A., College of St. Thomas, 1972

Susan M. Schoenheider, *Associate Professor (1995)*

- D.C., Northwestern College of Chiropractic, 1973
- B.A., Concordia College, 1996

Della J. Shupe, *Assistant Professor (2002)*

- M.A., University of Denver, 1973
- B.A., Bethel College, 1971

Lisa L. Simensen, *Associate Clinic Faculty (2001)*

- M.OM., Northwestern Health Sciences University, 2002
- L.Ac.
- Dipl.Ac. (N.C.C.A.O.M.), 2000

David J. Smith, *Associate Professor (1996)*

- C.C.S.P., 1994
- D.C., Northwestern College of Chiropractic, 1983

David E. Stude, *Associate Professor (1989)*

- D.A.C.B.S.P., 1998
- C.S.C.S., 1997
- C.C.N., 1997
- D.A.C.B.N., 1996
- D.C., National College of Chiropractic, 1984
- B.S., National College of Chiropractic, 1984
- M.S., Loyola University (Illinois), 1980
- B.S., St. John's University, 1977

Joseph J. Sweere, *Professor (1986)*

- D.A.B.C.O., 1974
- D.A.C.B.O.H., 1974
- D.C., Northwestern College of Chiropractic, 1961

Kim L. Swineheart, *Assistant Professor (1998)*

- D.C., Northwestern College of Chiropractic, 1996

Stacy M. Thornhill, *Assistant Professor (2000)*

- D.A.C.R.B., 2002
- D.C., National College of Chiropractic, 1998

Noni H. Threinen, *Assistant Professor (1998)*

- D.C., Northwestern College of Chiropractic, 1987
- B.A., Gustavus Adolphus College (MN), 1973

Mary M. Tuchscherer, *Associate Professor (1985)*

- D.C., Northwestern College of Chiropractic, 1991
- Ph.D., University of Minnesota, 1987
- M.S., University of Minnesota, 1983
- B.S., Saint Norbert College (WI), 1979

Brian J. Turner, *Instructor (1996)*

- B.S., University of Minnesota, 1989

Daniel H. Wallace, *Professor (1978)*

- Ph.D., University of Minnesota, 1977
- B.S., St. Cloud State College, 1972
- A.A., North Hennepin Junior College, 1970

Mei Wang, *Assistant Professor (2001)*

- M.Med (China), Henan College of Traditional Chinese Medicine, 1999
- B.Med (China), Henan College of Traditional Chinese Medicine, 1986

Sarah Weaver, *Assistant Professor (2000)*

- M.F.A., University of Minnesota, 2000
- Certificate, Northern Lights School of Massage Therapy, 1993
- N.C.T.M.B., 1992
- B.A., Oberlin College (OH), 1989

Orville L. Weiszhaar, *Lecturer (1996)*

- Ph.D., University of Minnesota, 1978
- J.D., William Mitchell College of Law, 1965
- M.S., University of Minnesota, 1964
- B.A., University of South Dakota, 1959

Jonathan C. Williams, *Associate Professor (1993)*

- F.A.A.C.P., 2001
- C.E.M., 2001
- D.A.A.P.M., 1991
- D.A.B.C.I., 1996
- D.C., Northwestern College of Chiropractic, 1989
- B.A., University of Plano, 1974

Jane E. Wittich, *Professor (1981)*

- Ph.D., University of Minnesota, 1981
- P.N.P.C., University of Minnesota, 1973
- B.S.N., University of Minnesota, 1970

John B. Wolfe, Jr., *Lecturer (1989)*

- J.D., William Mitchell College of Law, 1989
- D.C., Northwestern College of Chiropractic, 1985
- B.A., Creighton University, 1981

Kurt W. Wood, *Professor (1987)*

- > D.A.B.D.A., 1998
- > D.A.A.P.M., 1991
- > D.C., Palmer College of Chiropractic, 1979

Zachary J. Zachman, *Associate Professor (1987)*

- > D.A.B.C.O., 1989
- > B.S., Northwestern College of Chiropractic, 1988
- > D.C., Northwestern College of Chiropractic, 1985



Northwestern offers
**extensive clinical
opportunities** in
seven public clinics.





A LEADER

in Chiropractic Education: Northwestern College of Chiropractic

CHIROPRACTIC PHILOSOPHY

One meaning of philosophy is the love or pursuit of wisdom. Philosophy is not something that is taught or learned in any one particular course, lecture, or laboratory. Rather, it is a process that evolves in unique ways for each individual. Northwestern will provide the environment for thought, observation, and other experiences through which you, as a student of chiropractic, will develop your personal philosophy of health care.

Northwestern College of Chiropractic's philosophy and goals are to develop and teach an approach that is open to and examines everything. Northwestern seeks out value and incorporates the strengths thereby identified into a dynamic science-based technique program. This integrated-methods curriculum attaches value first to established, research supported knowledge; second to consistency with biomechanical principles; third to tradition; and finally an openness to new procedures requiring investigation.

Each patient is unique in clinical practice. Therefore, the management of each patient's care needs to be unique to the individual. Quality health care involves science as well as art, technical competence, good communication skills, and compassion and empathy for the patient, all of which combine to form an individual's philosophy. One doctor's approach to patient care is unlikely to be a mirror image of another doctor's approach. This is not because one doctor is right and another doctor is wrong. Rather, each is using his or her wisdom and skill in the best interest of the patient.

The faculty members of Northwestern are leaders in innovative methods in the education and training of the chiropractic clinician. They strive for a leadership position in the initiation and conduct of clinical research; the documentation and establishment of professional standards of care and guidelines; and the delivery of high-quality patient care in the community.

During your years at Northwestern, you will begin to develop your personal philosophy regarding clinical chiropractic

health care. We promise to provide mentors to challenge you, leaders for you to follow, and peers with whom to grow.

COMING TO COLLEGE: THE ADMISSIONS JOURNEY

Admission to the College

Northwestern admits as students men and women of good character who are qualified by previous education and experience to meet its academic challenges and to become practicing Doctors of Chiropractic. New students are admitted at the beginning of each trimester of the academic year: September, January, and April. Transfer students may also be admitted at those times. (See "Transfer Application" section.)

Application for admission are available online on our web site at www.nwhealth.edu or they may be obtained by contacting the Office of Admissions. The application for admission must be accompanied by a nonrefundable application processing fee of \$50 (U.S. dollars). It is the responsibility of the applicant to read this catalog and comply with all provisions and instructions.

Entrance Requirements

The following minimum requirements for admission apply to all candidates seeking admission to Northwestern and are consistent with the standards set forth by the Council on Chiropractic Education:

1. Applicants must have completed three academic years (90 semester hours or 135 quarter hours) of college credit (of which 30 semester credits must be upper division) acceptable toward a baccalaureate degree (see required distribution in next column). Upper division credits would be at least "200" or above, and preferably "300" or higher. Pre-chiropractic courses must be completed at a college or university accredited by a regional accrediting agency recognized by the United States Department of Education, or an equivalent foreign institution. No more than 20 semester

hours may be acquired through CLEP examinations or challenging of courses and only in courses other than required science courses. All science courses must be taken for letter grade.

2. Specific course distribution requirements and examples of acceptable courses are as follows:

<i>Subject</i>	<i>Minimum Semester Hrs.</i>	<i>Minimum Quarter Hrs.</i>
One academic year of Biology (with labs) Animal/Vertebrate General Biology/Zoology; Anatomy; Physiology; Microbiology	6	9
One academic year of General/Inorganic Chemistry (with labs) General Chemistry I and II or variations in course title (Principles of Chemistry, Inorganic Chemistry, Introductory Chemistry)	6	9
One academic year of Organic Chemistry (with labs) Usually titled Organic Chemistry I and II	6	9
One academic year of Physics/Quantitative Sciences/Biomechanics <i>First semester/quarter:</i> algebra or trigonometry-based General Physics I, with lab. <i>Second semester/second and third quarters:</i> General Physics II; Inferential Statistics; Biomechanics; Kinesiology or Exercise Physiology for majors	6	9
Psychology General Psychology; Principles of Psychology; Introductory Psychology	3	4.5
English, Literature or Speech Composition is strongly recommended. Composition, literature or speech courses are acceptable. Drama, Mass Communications, Theater and Journalism may not be used to meet this distribution requirement.	6	9

Humanities or Social Sciences 15 22.5

Philosophy, Religion, General Humanities, Art History, Music History, Psychology, Sociology, Anthropology, History, Political Science, or Economics courses are acceptable. Business courses and studio courses in art or music may not be used to meet this distribution requirement.

Electives 42 63

Recommendations for elective courses include Human Anatomy, General Physiology, Cell Biology, Cell Physiology, Immunology, Genetics, Macroeconomics, Marketing, Small Business Management, Public Speaking and Technical Writing, Medical Terminology.

TOTAL 90 135

Only courses completed with a grade of "C" or better (2.0 on a 4.0 scale) will be accepted. A grade of "C-" is not acceptable if the awarding college states that the numerical equivalent is less than 2.0. All coursework must be applicable to bachelor's degree requirements in a regionally accredited undergraduate institution; remedial or developmental courses will not be accepted.

As indicated in the table of course requirements, Northwestern requires that students complete one academic year in each distribution within the natural and physical sciences. In other words, students will complete two semesters or three quarters in sequence. Science courses must be taken in the logical sequence – for example, General Chemistry I must be taken before General Chemistry II. In most cases, students will complete 8 to 10 semester credits (12 to 15 quarter credits) in each distribution during a one year sequence. All science courses should be foundation courses designed for science majors. Survey courses intended for non-science majors will not be accepted.

3. Applicants must have earned a cumulative G.P.A. of at least 2.5 and a science G.P.A. of at least 2.00. All course work is counted toward the cumulative G.P.A. and all science courses are included for the science G.P.A., not just selected course work. Applicants should realize that these are minimum grade points. To ensure acceptance, a more competitive grade point is desirable.



Qualifications

A student must possess the following abilities, with or without reasonable accommodation, for completion of the Doctor of Chiropractic degree program:

1. Ability to use both upper extremities in the performance of common chiropractic procedures and techniques, including but not limited to positioning patients, palpating, feeling with hands, pushing, pulling, thrusting with hands and wrists, grasping, and lifting up to ten pounds;
2. Ability to perform in all laboratory and clinical settings without posing a threat to herself/himself, to the safety and well-being of fellow students, or to patients;
3. Ability to determine depth and intensity of manual pressure and force, as applied in the performance of common chiropractic and adjunctive procedures and techniques;
4. Ability to see and hear, with or without reasonable accommodation, sufficient that the student can identify histologic, cytologic, microbiologic and pathologic structures through a microscope; receive and record patient histories; provide instructions to patients; provide routine patient safety services; perform stethoscopic and other auscultatory examinations; and read and interpret all forms of diagnostic imaging;
5. Ability and willingness to receive chiropractic and adjunctive treatment. *Much of the technical instruction in the programs requires reciprocal application of chiropractic and adjunctive techniques. In reciprocal laboratory experiences, receiving techniques is necessary in order to learn proper procedures, and to receive and provide learning feedback; reciprocal application of technique is also useful for developing sensitivity to client needs. The College may temporarily excuse a student from receiving chiropractic treatment provided that there is a specific medical contraindication, as determined in writing by a licensed health care professional.*

All students, with or without reasonable accommodation, must carry out laboratory assignments, including microscopic work and X-ray interpretation. Qualified persons with disabilities, with or without reasonable accommodation, must be able to pass oral, written and practical examinations and meet all of the clinical requirements of the University.

It is in the best interests of both the student and the University to assess the degree of limitation caused by disability. However, the University will make the final determination of whether or not an individual meets all qualifications for study at the University.

Persons who have been convicted of any felony or misdemeanor of a violent or sexual nature may be prohibited from professional health care practice in many jurisdictions. Northwestern Health Sciences University can deny admission to applicants with such convictions. The University may conduct a criminal background check on applicants.

Responsibility of Applicant

It is the responsibility of the applicant to be aware of the entrance requirements and to ensure that they are met prior to enrollment.

If the College determines at any time that requirements are not met in full, the student will not be allowed to enroll or to continue at Northwestern.

The Office of Admissions personnel is available to help prospective students plan their pre-chiropractic curricula.

Minnesota Immunization Requirement

All students born in 1957 or later must comply with the Minnesota State College Immunization Law (Minn. Stat. 135A.14). You must show DPT immunization within the last 10 years; and measles, mumps, and rubella immunization after your first birthday. However, exemptions are permitted for philosophical or medical reasons. Further information is included with letters of acceptance to Northwestern.

Some clinical environments outside the University Clinic system may establish immunization and/or health screening requirements exceeding the Minnesota State College Immunization Law. In addition, some clinical environments outside the University Clinic system may not accept placement of interns who have not received or are not in the process of receiving certain immunizations and/or health screenings.

Application for admission must include:

1. A properly completed application for admission. Please type or print neatly.
2. An application processing fee of \$50 (U.S. dollars). This fee is non-refundable.
3. Official transcripts from all colleges attended sent directly to Northwestern Health Sciences University from those colleges. High school transcripts are not required.

(Note: Please indicate on your application if your transcripts will be arriving under another name.)

4. Three completed character reference forms. References should be people who have known you for a period of at least six months. References from professors and chiropractors are preferred. Relatives are not accepted as references. Northwestern will send character reference forms to those references listed on the application, who should then complete the form and return it to the University.

5. A completed essay (see Application Form for instructions).

Selection of Candidates

The Admissions Committee in general seeks to matriculate students who best suit the philosophies and goals of the University, which include providing an education in the scholarly and humane aspects of chiropractic, and fostering the development of leaders who will advance chiropractic practice and knowledge. Northwestern attempts to select students who have strong academic records and who demonstrate the motivational and personal characteristics suitable for a career in chiropractic. Service and a caring attitude are important characteristics of the future Doctor of Chiropractic. The University employs a rolling admissions process; therefore, early application could increase the applicant's probability for acceptance. It is best to apply 9-12 months in advance of the entering date desired.

In recent years, applicants granted admission have had an average G.P.A. of about 3.0 (A=4.0). The University encourages campus visits for all applicants and reserves the right to require an interview.

Tuition Deposit Policy

Applicants will be notified in writing of the Admission Committee's decision regarding their application following receipt of all application materials and committee review. Upon notification of acceptance, a candidate must remit a tuition deposit of \$300 (U.S. dollars) to reserve a position in the entering class. This tuition deposit is non-refundable but is applied toward the first trimester tuition. The tuition deposit should be submitted shortly after notification of acceptance since processing of financial aid is initiated only after receipt of the tuition deposit. First trimester students who have been accepted and paid their \$300 (U.S. dollars) tuition deposit must pay the balance of their first trimester tuition on the first day of class. If the student has a Stafford Loan in progress for the first trimester at Northwestern, then the first trimester

tuition will be credited against this loan. It is important to note that because of the limited space available in each class, scheduling priorities, and the cost of education, the institutional refund policy does not apply to the \$300 tuition deposit.

Transfer Application

A student wishing to transfer from another chiropractic college must:

1. Follow the same application procedures as a new student (see previous section in catalog).
2. Submit an official transcript from the chiropractic college(s) previously attended.
3. Submit two letters of recommendation from faculty members of the chiropractic college previously attended, as well as a letter from that college's registrar indicating the student applicant is leaving that college in good standing and could continue studies at their present chiropractic college.
4. The applicant's academic record must further allow for the student to be admitted without probation or other restriction, as defined by Northwestern policies.
5. Transfer credit may be granted for courses completed with a grade of "C" or better from another chiropractic institution. Those courses must have content similar to corresponding Northwestern courses of the same name and level. The Northwestern registrar will determine that comparability.
6. All credits that the student wishes to transfer to the Northwestern program must be applied for and posted to the applicant's Northwestern records prior to matriculation.
7. A transfer student must complete at least five trimesters of resident study in the Northwestern program prior to graduation.
8. Excessive indebtedness as a result of financial aid borrowing will be a factor in the Admissions Committee's decisions regarding acceptance of a transfer student. The Student Records and Financial Services Office will set upper limits of previous indebtedness.
9. These policies are subject to updating and modification. Contact the Office of Admissions for current information.

Advanced Placement

Advanced placement gives a student credit for a Northwestern course based on work completed before matriculation at Northwestern Health Sciences University. Advanced placement also requires completion of a competency examination written by the faculty and provided by the chairperson of the appropriate department.

Applicants may sit for competency examinations if their official transcripts show:

1. work in the subject area in addition to that required for admission and taken in upper-division courses;
2. coursework completed with a grade of "C" or better;
3. coursework taken within a period of five years;
4. a request to take the examination filed no later than two weeks before entering Northwestern.

Unless otherwise announced, examinations will be given the Friday before the first day of classes. This is the one and only chance to apply for advanced placement. Credit cannot be granted for any clinical-level courses taken in a college of liberal arts and sciences.

Transfer students from accredited chiropractic, osteopathic, or medical colleges are given transfer credit and actual contact hours up to those equivalent to Northwestern standards. Advanced placement is not granted for only one part of two-part basic science courses such as Physiology I and II (see trimester 2 and trimester 3 in the course list section).

Questions about advanced placement should be directed to the Office of Admissions.

Foreign Applicants

Matriculants from foreign countries must meet the same educational requirements as students matriculating from the United States. The student should note the entrance requirement and application procedure sections. The student must also fulfill the following:

1. Have the endorsement of the chiropractic organization in his or her home country (if such an organization exists).
2. Verify competency in English. All classes at Northwestern are taught in English.

A student may verify competency in English in the following manner:

a. Students from English-speaking countries (excluding the Canadian province of Quebec) may include with their application a copy of their birth certificate. Or, these applicants may complete an English competency verification form, which can be obtained from the Office of Admissions. We reserve the right to request proof of English proficiency of any applicant.

b. All other foreign applicants (including students from the Canadian province of Quebec) must complete a T.O.E.F.L. (Test Of English as a Foreign Language) examination. Applicants completing the paper-based examination must earn a score of 540 or higher. Applicants completing the computer-based examination must earn a score of 207 or higher. Results of the T.O.E.F.L. must be sent directly to Northwestern from the testing agency. T.O.E.F.L. information can be obtained from: T.O.E.F.L., P.O. Box 6154, Princeton, NJ 08541-6154, U.S.A..

3. Provide evidence of having financial resources to complete a minimum of one year of education. Official bank statement indicating sufficient funds is required.

4. Have foreign transcripts evaluated by an international transcript evaluation service such as World Education Services, Inc., (P.O. Box 745, Old Chelsea Station, New York, NY 10011) with official copies of the course-by-course evaluation being forwarded directly to both Northwestern and the student. Contact the Office of Admissions for a WES application form or names of other accepted transcript evaluation services.

We recommend that all foreign students be aware of the licensure requirements in the country in which they wish to practice. A student can contact the chiropractic licensing board in their province or country for that information.

Educational Requirements of Non-U.S. Citizens

The following non-U.S.-based programs are recognized as being equivalent to the preprofessional requirements of the C.C.E.-U.S.A. Successful completion of one of these programs, in its entirety, will normally fulfill the entrance requirements to Northwestern. However, students who have completed these programs should contact the Office of Admissions for the most current information. Northwestern also reserves the right to request a transcript review by an evaluation service.

1. The French Propedeutique
2. The Danish Matematisk Studentereksamen
3. Odense University Pre-chiropractic Program
4. The Swiss Matura and First Medical Propedeutical or qualifying report
5. The Richmond College of London Pre-chiropractic Program
6. College d'enseignement general et Professional or its Canadian English equivalent.

For students from Mexico, a special schedule of courses has been developed which supplements the Bachillerato Preparatoria as the prerequisite for entry to the Doctor of Chiropractic program. Students from Mexico should contact the Office of Admissions for the most current information.

THE CLINICAL EXPERIENCE

University Health Service

Student interns prepare to enter fee-for-service clinic settings by first providing care to Northwestern students and their families in the University Health Service located in the De Rusha Clinical Education Center. In the sixth trimester, interns first complete a structured laboratory experience in which they refine their skills by interviewing and examining early trimester students and simulated patients. During this initial phase they review, practice and discuss all elements of the clinical process in laboratory, lecture and small group discussion settings. In the seventh trimester, interns participate with faculty clinicians in the care of patients from the campus community. Patient and professional communication, cultural competence, clinical thinking and case management are topics emphasized in lecture and small group discussion sessions.

Northwestern's Natural Care Centers and Community Based Internship

In the eighth and ninth trimesters, students continue working with faculty in the Natural Care Centers of the University or the Community Based Internship program. The Natural Care Centers are located throughout the Twin Cities metropolitan area and provide students with rich clinical experiences

and contact with a diverse patient population. In each clinic, a small student-to-faculty ratio also results in a close relationship between a clinical mentor and each intern.

The Woodwinds Natural Care Center is located on a medical campus that includes a 70-bed hospital. This clinic, one of the first of its kind in the United States, features a variety of patient services, including chiropractic, massage therapy, acupuncture and Oriental medicine, and naturopathy. The promotion of integrated and collaborative natural and conventional medicine care is a unique objective of Northwestern's newest teaching clinic.

Community Based Internship (C.B.I.), a Northwestern innovation, is another opportunity available to students in the eighth and ninth trimesters. Students who serve their internship in the C.B.I. program are placed in the private practice of a doctor of chiropractic who participates with the University in clinical education. Approximately 150 doctors throughout Minnesota have mentored chiropractic students from Northwestern during their fee-for-service internship experience.

Preceptorship Program

Tenth trimester students who have completed all the clinical requirements of the University and the Council on Chiropractic Education have the option of completing their training with doctors of chiropractic practicing in over 30 states and many foreign countries. This program provides an opportunity for final term students to begin the transition to private practice.

Interdisciplinary Observation

For a more comprehensive learning experience, students may observe the clinical practices of other health care professionals including neurologists, orthopedic surgeons, osteopaths, and medical and chiropractic radiologists. Through participation in this program, students come to better understand the rationale for different approaches to care; are exposed to a wider range of patient conditions; and understand the means for patient management through consultations and referrals.

The complete array of clinical opportunities for Northwestern interns is unmatched in chiropractic education. Students participate in these experiences starting in the sixth trimester and extend through graduation. These educational programs demonstrate the University's commitment to clinical excellence and preparedness for professional success.

ACADEMIC POLICY

Trimester Credits

The academic calendar includes Fall, Winter, and Summer trimesters of 15 weeks each. In general, one credit represents one lecture hour, two laboratory hours, or two clinical hours per week.

Attendance Policy

Students are required to fulfill all course responsibilities, including class attendance, which are described by faculty in the course syllabus.

Academic Evaluation and Grades

Academic evaluation provides incentives to students, rewards achievement, and identifies students who are having difficulty. Final grades in each subject, issued at the end of each trimester, reflect students' performance in some combination of the following: comprehensive final examinations, announced tests, quizzes, assignments, classroom and laboratory work, participation in and contribution to class discussions, and attendance. Class grades summarize student achievement levels relative to objectives explained by the instructor.

Students who complete all the work assigned in a course are graded as follows: A, B, C, or D (excellent, above average, average, or minimal achievement, respectively). Honor grade points (for calculating grade point averages) are awarded on the scale starting with four points for an A and one for a D. Students who fail to achieve minimal competency are graded with F for failure. An incomplete (I) indicates that the full work of the course has not been completed because of illness or some cause beyond the student's control.

Academic Honors

Students receiving and/or maintaining a G.P.A. of 3.50 or above are placed on the Dean's List for academic honors. Academic honors at graduation are determined according to the following grade point levels:

<i>Honor</i>	<i>G.P.A. Range</i>
Cum laude	3.50 - 3.69
Magna cum laude	3.70 - 3.89
Summa cum laude	3.90 - 4.00

Regulations Concerning Probationary Status

Students are placed on probation when their cumulative grade point average is less than 2.0 at the end of any trimester. Students are automatically placed on probation if they earn a failure in any course. Students who fail to bring their cumulative grade point average up to a satisfactory level after two trimesters on probation are dismissed. The Student Handbook provides details pertaining to probation, dismissal, review procedures and special student status.

GRADUATION

Requirements for Graduation

The Doctor of Chiropractic degree is granted to those candidates who have:

1. completed the required course of study, of which the last five terms have been in residence at Northwestern Health Sciences University;
2. demonstrated competency in clinic and completed internship and field experience requirements;
3. earned at least a 2.0 cumulative G.P.A.; and
4. fulfilled all financial obligations to the College.

For information on current fees, contact the Accounting Office at 952-888-4777. Northwestern reserves the right to add additional requirements as it deems necessary.

Graduation Rate

More than 90 percent of Northwestern's chiropractic students graduate within five years of matriculation.

Licensure

Successful completion of a Doctor of Chiropractic degree is a minimum eligibility requirement for examination before the licensing boards in all 50 states and the District of Columbia, and all foreign countries that license chiropractic practitioners. Some jurisdictions may impose requirements for licensure in addition to a D.C. degree. Students should become familiar with the licensure policies and requirements of the jurisdiction in which they intend to practice. Information regarding licensure policies and requirements may be found in the Career Services Office or the Greenawalt Library.

CURRICULUM OVERVIEW

The Doctor of Chiropractic curriculum at Northwestern consists of five academic years (31/3 calendar years). Each year consists of two 15-week trimesters. The base of the curricular studies is composed of courses in the foundation sciences. These courses lay the groundwork for further study in the clinical sciences as well as clinical experiences. A 12-month public clinic internship and preceptorship constitute the last three trimesters. Northwestern offers three trimesters: Fall, Winter, and Summer.

Students begin learning “hands on” chiropractic techniques beginning in their first trimester and progress to supervised in-class adjusting in trimester 3. Chiropractic therapies taught are broad based but stress those adjusting and manipulative procedures that have been proven most effective and which are consistent with biomechanical and biophysiological principles.

These adjusting skills are complemented by related therapeutics such as physiotherapy, acupuncture, nutrition counseling, exercise training, rehabilitation, and mobilization procedures. Students learn to educate patients regarding healthy living practices, encouraging a holistic view of both mental and physical well-being.

Graduates of Northwestern are prepared to practice as first-contact, primary care physicians able to take responsibility for the health of patients. The diagnostic acumen and therapeutic skill sets required for primary care clinicians requires a strong background in the foundation sciences as well as current and relevant studies in the clinical sciences. Critical thinking and clinical decision making skills must be developed in order to make the most appropriate patient-centered health care decisions.

Northwestern students are trained to work in cooperation with all other health care providers. To facilitate such interdisciplinary practices medical providers are sought as members of the campus clinic staff or for its formal network of physicians with whom the clinics interact. Opportunities are also available for interns to spend time as observers within local medical practices.

Course Load

The breadth, depth and scope of courses and resulting study load in each term of the curriculum at Northwestern is similar to that in other health care professional schools in its academic rigor. As a result, students should expect substantially heavier loads at Northwestern than at colleges where they completed

their pre-chiropractic studies. Those entering or continuing students who wish to modify their course load may benefit from split-schedule registration. A student may request split-schedule information from the Office of the Registrar. Use of a split schedule of courses may add some time and expense to the completion of the academic program.

All students are considered full-time unless classified otherwise by the Academic Standards Committee or by special arrangement through the Student Affairs office of the College of Chiropractic. Due to the nature of the chiropractic program of study, all students are expected to maintain continuous enrollment. However, in the event that a student requires a term off due to unforeseen circumstances, upon request by the student, the University will consider a leave of absence.

Course Sequence

The chiropractic curriculum is taught in the following pattern:

Trimesters 1 and 2 – courses in foundation sciences; introductory chiropractic principles and methods; and radiology.

Trimesters 3, 4, and 5 – completion of foundation sciences; advancement in chiropractic methods and sciences; and progress in clinical sciences, including diagnosis and radiology.

Trimesters 6 and 7 – completion of radiology sequence; completion of core curriculum chiropractic science courses, including physical therapy; continued advancement in clinical sciences, including clinical pathology; and University Health Service internship preparatory to service in the University's public clinics.

Trimesters 8, 9, and 10 – service in the University's clinics over a 12-month period; completion of clinical sciences, practice management sequence preparatory to entrance into private or group practice; and elective opportunity to participate in a private practice as a chiropractic physician-preceptor's associate.

Curriculum Organization

Didactic learning experiences in the Doctor of Chiropractic degree program are offered through the following academic programs of the College of Chiropractic. While engaged in these studies, students make the transition to becoming chiropractic physicians. In the classroom, laboratory, and clinics, students learn to take patient health histories and conduct examinations, consisting of physical, neurological, orthopedic, radiological and laboratory procedures, and

interpret findings in forming clinical decisions. Students learn that proper diagnosis is fundamental in determining appropriate treatment and in measuring the patient's response to chiropractic care practice.

Business Foundations

The learning opportunities in this area will produce graduates cognizant of the aspects of business to allow for success in application of their craft as a primary care clinician. The principles covered are applicable regardless of the business entity or arrangement in which the graduate finds him/herself. The objectives of this program are to prepare the graduating chiropractor with the additional tools and outside clinical competency necessary to succeed in the business of health care delivery. Examples of courses are ethics, legal aspects of chiropractic practice and the business of clinical practice.

Clinician Development

The courses and clinical experiences contained within this program comprise that body of knowledge, attitudes and behaviors necessary in the evolution of becoming a professional as well as a chiropractic clinician. A variety of learning interventions and opportunities are offered to ensure a broad exposure to clinical experiences to allow the learner to discover the types of clinical settings which are personally most appealing and rewarding. Examples of course offerings are professional issues and clinical chiropractic. Clinical practica such as outpatient experiential learning, interdisciplinary setting rotations and field experiences are included.

Diagnosis, Imaging and Special Studies

Learning opportunities in this program will assist the development of knowledge and skills necessary to arrive at plausible differential diagnoses for patients with a variety of health care needs in ambulatory care settings. It is understood that learning to diagnose is a process that involves cognitive, behavioral and affective skills that are acquired over a period of time and sharpened with clinical experiences. Course work and experiences include patient interviewing, clinical laboratory and radiology diagnosis, differential diagnosis and organ/system pathophysiology.

Foundation Sciences

Course work in the foundation sciences build the framework upon which all the clinical courses rest as well as underscore the basis for learning advanced theories of health care. A solid

knowledge of foundation information will ensure comprehensive understanding of the complexities of disease and disorders encountered in primary care settings. Sample coursework includes anatomy, physiology, biochemistry and pathology.

Health and Wellness Education

Doctors of Chiropractic need to be well versed in the health and wellness arena. The courses in this program are deliberately focused on health rather than the detection of disease or pathology. The contents of this program stress the importance of attaining, maintaining, and promoting health and wellness. Course curricula will aid the learner in developing a personal approach to imparting healthy habits to patients as well as a keen sense of potential for health and wellness promotion opportunities in the practice of chiropractic health care. Representative course work includes maternal and infant health, children's health care, women's health, men's health and nutrition studies.

Principles and Methods

This program and its contents set the art and science of chiropractic health care apart from other methods of delivery of health care. The principle tenets upon which the profession of chiropractic was founded are explored and discussed. Course work and experiential learning avenues will prepare the learner and set the stage for the life-long journey to becoming a master in the art of manipulation. Learners will take classes covering physiological therapeutics, exercise and rehabilitation as well as three years of methods curricula that includes a final term of methods offerings that the learner can customize for him or herself.

Clinic Experience

The clinical phase of the curriculum consists of progressive and mentored patient contact preparing students for competent and successful chiropractic practice. Students develop their patient care skills through a variety of real-world experiences in the Natural Care Centers of Northwestern Health Sciences University, with chiropractic doctors working in private practice settings, and in community service learning environments.

Course List

The required curriculum for the Doctor of Chiropractic Degree is composed of a sequence of courses offered in 10 separate 15-week trimesters for a minimum total of 4,279.25 contact hours, exclusive of elective courses of study.

Trimester 1 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
11010	Biochemistry 1	4		2	-	5	90
25510	CPR	.5		-	-	.5	8
13010	Gross Anatomy 1	3		5	-	5.5	120
15010	Histology 1	3		1.5	-	3.75	67.5
22710	Infection Control	.2		-	-	.2	3
33010	Methods 1			2	-	1	30
22510	Professional Issues	.5		-	-	.5	8
31010	Principles & Philosophy 1 1			-	-	1	15
20010	Skeletal Radiology 1	1		1	-	1.5	30
34010	Spine and Pelvis	3		-	-	3	45
	Totals	16.2		11.5	-	21.95	416.5

Trimester 2 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
14220	Embryology	2				2	30
13120	Gross Anatomy 2	4		3	-	5.5	105
15120	Histology 2	3		1	-	3.5	60
33120	Methods 2	1		2	-	2	45
12120	Neuroscience 1: PNS	4		-	-	4	60
11120	Physiology 1	4		1	-	4.5	75
31120	Principles and Philosophy 2	2		-	-	2	30
	Totals	20		7	-	23.5	405

Trimester 3 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
11330	Biochemistry 2	2	-	-	-	2	30
33230	Methods 3	1.5	3.5	-	-	3.25	75
36030	Neuromusculoskeletal 1	3	-	-	-	3	45
12230	Neuroscience 2: CNS	3	-	-	-	3	45
17030	Pathology 1	3	-	-	-	3	45
11230	Physiology 2	4	1	-	-	4.5	75
21030	Physical Diagnosis	3	2	-	-	4	75
32030	Principles of Evidence-based Healthcare	1	-	-	-	1	15
37030	Principles and Philosophy 3	2	-	-	-	2	30
20130	Skeletal Radiology 2	2	1	-	-	2.5	45
	Totals	24.5	7.5	-	-	28.25	480

Trimester 4 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
33340	Methods 4	1.5	3.5	-	-	3.25	75
16040	Microbiology	4	2	-	-	5	90
21140	Neurodiagnosis	2	1.5	-	-	3	56.25
36140	Neuromusculoskeletal 2	4	1	-	-	4.5	75
36141	Neuromusculoskeletal 3	2	3	-	-	4.5	90
17140	Pathology 2	3	-	-	-	3	45
22040	Principles and Philosophy 4	2	-	-	-	2	30
20240	Skeletal Radiology 3	2	1	-	-	2.5	45
	Totals	20.5	12	-	-	27.75	506.25

Trimester 5 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
21250	E.E.N.T.	2		1		2.5	45
36350	Clinical Nutrition 1	4		-	-	4	60
24050	Clinical Pathology 1	2		1.5	-	2.75	52.5
25150	Infectious Diseases	2		-	-	2	30
41050	Introduction to Clinical Chiropractic	1		-	-	1	15
34150	Methods 5	1		2	-	2	45
41040	Patient Interviewing	1		-	-	1	15
35151	Physiological Therapeutics 1	1		2.5	-	2.25	52.5
25250	Public and Preventive Health	2		-	-	2	30
20350	Skeletal Radiology 4	2		1	-	2.5	45
	Totals	18		8		22	390

Trimester 6 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
23365	Cardiopulmonary System	3		2	-	5	90
24160	Clinical Pathology 2	3.5		1.5	-	4.25	75
41060	Clinic Internship 1	1		-	4	3	75
23562	Gastrointestinal/ Genitourinary Systems	3		1	-	4.5	75
34260	Methods 6	1		2	-	2	45
33561	Physiological Therapeutics 2	2		1	-	2.50	45
24760	Principles and Philosophy 5	1		-	-	1	15
20460	Radiation Physics and Safety	2		1	-	2.5	45
20661	Radiology of the Abdomen and Chest	2		1	-	2.5	45
	Totals	18.5		9.5	4	27.25	510

Trimester 7 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
41170	Clinic Internship 2	1	-		6	4	105
36470	Clinical Nutrition 2	2	-		-	3	45
23890	Dermatology	1	-		-	1	15
25570	Emergency Procedures	1.5	2		-	2.5	52.5
23670	Endocrinology	1.5	-		-	1.5	22.5
25380	Maternal & Infant Health 2		-		-	2	30
26170	Mental Health 1	2	-		-	3	45
33670	Methods 7	1	2		-	2	45
25980	Pharmacology	2	-		-	2	30
35170	Physiological Therapeutics 3	1	1		-	1.5	30
20570	Radiographic Technology and Positioning	1	1		-	1.5	30
23570	Women's Health	2	.5		-	2.25	37.5
	Totals	18	6.5		6	26.50	487.5

Trimester 8 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
41080	The Business of Clinical Practice 1	2	-		-	2	30
25490	Children's Health	2	-		-	2	30
42280	Clinical Case Studies 1	1	-			1	15
41280	Clinic Internship 3	-	-		16	9	272
25690	Health & the Older Person	2	-		-	2	30
26280	Mental Health 2	2	-		-	3	45
	Totals	9			16	19	422

Trimester 9 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
43290	The Business of Clinical Practice 2	3	-	-	-	3	45
42390	Clinical Case Studies 2	1	-	-	-	1	15
41390	Clinic Internship 4	-	-	-	16	9	272
47190	Legal Aspects of Chiropractic Healthcare	2	-	-	-	2	30
	Totals	6	-	-	16	15	362

Trimester 10 > 15 weeks

Course Number	Title	Lecture	<i>(Hours per week)</i>		Clinic	Credits	Clock Hours
				Lab			
41400	Clinic Internship 5	-	-	-	20-40	10	300-600
	Totals	-	-	-	20-40	10	300-600

Total Minimum **4,279.25**

A Bachelor of Science Degree in Human Biology is offered through Northwestern Health Sciences University, School of Undergraduate and Graduate Studies. The degree is structured so as to allow a student, who has completed certain prerequisite courses, to complete the bachelor's degree while enrolled in the Doctor of Chiropractic program. Information about the bachelor's degree is available from the University Admissions Office.

COURSE DESCRIPTION

11010 Biochemistry 1

5.00 credits (90 hours): 60 lecture hours;
30 laboratory hours

The functional chemistry of the human body, integrating topics in cellular physiology with biochemistry; buffers, proteins, enzymes, carbohydrates, lipids, nucleic acids, and intermediary metabolism. Lab includes methods of separation and identification of biochemical constituents.

11330 Biochemistry 2

2.00 credits (30 hours): 30 lecture hours
Prerequisite: Biochemistry 1

A continuation of Biochemistry 1: glycogen, gluconeogenesis, fatty acid and amino acid metabolism, urea cycle, steroids, liver biotransformations, vitamins, and trace elements.

41080 The Business of Clinical Practice 1

2.00 credits (30 hours): 30 lecture hours

Principles of effective patient and practice management. Communication principles and attitudes necessary in building the doctor-patient relationship. Practice and personal development strategies for successful careers. Setting goals and looking beyond graduation. Classroom workshop participation. Oral presentation is required.

43290 The Business of Clinical Practice 2

3.00 credits (45 hours): 45 lecture hours

The essentials of proper business and practice management are introduced. Topics include accounting, taxes, budget preparation, financing, marketing, investing, and practice opportunities. Principles of investment are presented. A personal, detailed business plan is required for a passing grade.

23365 Cardiopulmonary System

5.00 credits (90 hours): 45 lecture hours; 30 laboratory hours; 1 credit of directed independent study
Prerequisite: Physical Diagnosis

Discussion of the presentation, diagnosis and treatment of common complaints and important cardiovascular and pulmonary disorders. Students learn diagnostic and treatment procedures, and discuss how doctors of chiropractic can participate in the management of patients who have these disorders.

25490 Children's Health

2.00 credits (30 hours): 30 lecture hours

Students develop an understanding of normal growth and development of the child. An emphasis is placed on lifestyles and behaviors that support health maintenance and prevent common disorders or diseases of childhood.

42280 Clinical Case Studies 1

1.00 credit (15 hours): 15 lecture hours

A variety of patient cases are presented and discussed in an interactive format. Most presenters are field doctors from the University's Community-Based Internship program.

42390 Clinical Case Studies 2

1.00 credit (15 hours): 15 lecture hours

Presentation and discussion of patient cases commonly seen in the outpatient clinic setting.

41060 Clinic Internship 1

3.00 credits (75 hours): 15 lecture hours;
60 clinic hours

The initial internship term begins with practical experiences accompanied by lecture and small group discussions, and supported by Web site resources. All elements of doctor-patient interaction are reviewed, discussed and practices including interviewing, examination, and development of a diagnosis and management plan, re-evaluation, outcome assessment and documentation. Through interaction with early-term chiropractic program students and simulated patients, interns refine the skills necessary for progression to the next phase of their clinical experience and share their experiences in small group discussions.



41170 Clinic Internship 2

4.00 credits (105 hours): 15 lecture hours;
90 clinic hours

Prerequisite: Clinic Internship 1

In the second internship term, students continue to apply and review all elements of the patient care process as they work with faculty clinicians in the University Health Service caring for patients from the campus community. In lecture and small group discussion sessions, students critique and discuss videotaped patient encounters. Topics emphasized include patient and professional communication, cultural competence, clinical thinking, and case management. During the practical and didactic elements of the course, students also advance their skills in gathering clinical information, synthesizing laboratory and radiographic data, arriving at accurate diagnostic decisions, providing health counseling and competently treating clinic patients.

41280 Clinic Internship 3

9.00 credits (272 hours): 272 clinic hours

Prerequisite: Clinic Internship 2

During the 17-week clinic term, interns provide chiropractic care to patients under the supervision of faculty clinicians. Doctors of Chiropractic mentor students in either the University's Natural Care Centers or the Community Based-Internship program as they further develop their competence in all elements of the clinical process. Prerequisites and other internship policies and procedures are described in the Clinic Handbook and explained during orientation sessions scheduled in trimesters 7 and 8.

41390 Clinic Internship 4

9.00 credits (272 hours): 272 clinic hours

Prerequisite: Clinic Internship 3

During the 17-week clinic term, interns provide chiropractic care to patients under the supervision of faculty clinicians. Doctors of Chiropractic mentor students in either the University's Natural Care Centers or the Community Based-Internship Program as they further develop their competence in all elements of the clinical process. Prerequisites and other internship policies and procedures are described in the Clinic Handbook and explained during orientation sessions scheduled in trimesters 7 and 8.

41400 Clinic Internship 5

10.00 – 20.00 credits (300 to 600 hours):
300 to 600 clinic hours

In the final academic term, students complete their internship by continuing to provide chiropractic care to patients in the University Natural Care Centers, or in select private chiropractic clinics. Students who have completed all clinic requirements related to patient visits, physical examinations, radiographic, laboratory and case management studies may expand their Clinic Internship 5 options to include working with clinicians in both urban and rural areas across the United States and in many foreign countries.

36350 Clinical Nutrition 1

4.00 credits (60 hours): 60 lecture hours

Prerequisites: Biochemistry 1 and 2;
Physiology 1 and 2

Discussion of nutrient metabolism and physiologic function in the body. Components of nutrition including vitamins, major minerals, and trace elements. Macronutrients and micronutrients are discussed along with clinical applications.

36470 Clinical Nutrition 2

3.00 credits (45 hours): 30 lecture hours;
1 credit of directed independent study

Prerequisite: Clinical Nutrition 1

Current application of nutritional management of common conditions encountered in chiropractic practice, including disorders of the organ systems. Discussion of nutritional needs throughout life. Students practice assessing nutritional status. Discussion of general, individual, and community nutritional needs along with special patient populations.

24050 Clinical Pathology 1

2.75 credits (52.5 hours): 30 lecture hours;
22.5 laboratory hours

Prerequisites: Gross Anatomy 1 & 2; Histology;
Physiology; Microbiology; and Biochemistry
1 and 2

Introduction to laboratory skills, including venipuncture, and discussion of urinalysis, hematology and serology. Emphasis on interpretation of laboratory test results and study of case histories to enhance clinical learning and diagnostic skills.

24160 Clinical Pathology 2

4.25 credits (75 hours): 52.5 lecture hours;
22.5 laboratory hours
Prerequisite: Clinical Pathology 1

Discussion of laboratory alterations accompanying abnormal function of body organs and specific diseases, with emphasis on interpretation of blood chemistries. Choosing appropriate lab tests. Correlation of laboratory results with patient history and examination findings. Case histories are discussed to enhance clinical learning.

23890 Dermatology

1.00 credit (15 hours): 15 lecture hours
Prerequisite: Physical Diagnosis

Discussion of the presentation, diagnosis, and treatment of dermatological conditions commonly encountered in chiropractic practice, including infections, tumors, allergic reactions, inflammatory conditions and skin injuries. Discussions as to how chiropractic doctors participate in the management of patients who have skin conditions.

21250 E.E.N.T.

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours
Prerequisite: Physical Diagnosis

Discussion of the presentation, diagnosis, and treatment of common complaints and disorders of the eyes, ears, nose, and throat. Students practice diagnostic and treatment procedures. Discussion on how doctors of chiropractic can participate in the management of patients with E.E.N.T. disorders.

14220 Embryology

2.00 credits (30 hours): 30 lecture hours
Corequisite: Gross Anatomy 2

The early human embryology (fertilization through the three germ layers) and the special embryology of the major organ systems as well as special sense organs.

25570 Emergency Procedures

2.50 credits (52.5 hours): 22.5 lecture hours;
30 laboratory hours
Prerequisites: Physical Diagnosis, Infection Control

Basic techniques of assessment and management of patients experiencing airway, breathing and circulatory emergencies. Customized for the chiropractic physician who may encounter

situations with adults or pediatric patients in clinical or field environments. Students receive A.H.A. Healthcare Provider C.P.R. certification and First Responder Certification from the State of Minnesota. Upon successful completion, students eligible to challenge the National Registry First Responder exam.

23670 Endocrinology

1.50 credits (22.5 hours): 22.5 lecture hours
Prerequisite: Physical Diagnosis

Discussion of the presentation, diagnosis, and treatment of common endocrine disorders and complaints, including the chiropractor's role in the management of patients with these disorders.

23562 Gastrointestinal/Genitourinary Systems

4.50 credits (75 hours): 45 lecture hours;
15 laboratory hours; 1 credit of directed independent study
Prerequisites: Physical Diagnosis, Clinical Pathology I
Corequisite: Clinical Pathology 2

Discussion of the presentation, diagnosis, and treatment of common gastrointestinal and genitourinary disorders and complaints. Students practice diagnostic and treatment procedures, and discuss how doctors of chiropractic can participate in the management of patients with these disorders.

13010 Gross Anatomy 1

5.50 credits (120 hours): 45 lecture hours;
75 laboratory hours

An in-depth study of the human skeletal and muscular systems, regional anatomy of the extremities, and an introduction to the nervous system. Laboratory includes human dissection.

13120 Gross Anatomy 2

5.50 credits (105 hours): 60 lecture hours;
45 laboratory hours
Prerequisite: Gross Anatomy 1
Corequisites: Histology 2, Embryology

The gross anatomy of the special sense organs and the nervous, circulatory, digestive, respiratory, urogenital, and endocrine systems; systemic and regional interrelationships. Laboratory includes human dissection.

25690 Health and the Older Person

2.00 credits (30 hours): 30 lecture hours

Prerequisite: Physical Diagnosis

Diagnosis and care of elderly patients, with emphasis on the most common conditions and complaints, especially those likely to be present in chiropractic offices. Discussion of normal aging versus disease, theories of aging, demographic trends, and special features of geriatric history taking, examination, diagnosis, and chiropractic care.

15010 Histology 1

3.75 credits (67.5 hours): 45 lecture hours;

22.5 laboratory hours

Microanatomy of cells and tissues. This course surveys the microscopy and ultrastructure of cells, introduces the four basic tissue types, and stresses the functional anatomy of epithelium, connective tissues, muscles, and nerve tissue.

15120 Histology 2

3.50 credit (60 hours): 45 lecture hours;

15 laboratory hours

Prerequisite: Histology 1

The functional microanatomy of the organs of the circulatory, digestive, respiratory, urinary, reproductive, endocrine and immune systems.

22710 Infection Control

0.20 credit (3 hours): 3 lecture hours

Students will learn the principles of infection control, bloodborne pathogens and OSHA regulations and apply them to both classroom and clinical settings.

25150 Infectious Diseases

2.00 credits (30 hours): 30 lecture hours

Prerequisite: Microbiology

Discussion of infectious disease, with emphasis on common pathogens and the diseases they cause. Discussion of the presentation, diagnosis and treatment of common complaints of infectious diseases.

41050 Introduction to Clinical Chiropractic

1.00 credit (15 hours): 15 lecture hours

This course assists the student through the transition from the classroom to the clinical environment by introducing the patient care and record-keeping procedures of the University Health Service. Web site resources augment lecture and small group discussion sessions covering all aspects of documentation and the clinic procedures students will follow during their initial patient care experiences in the subsequent term.

47190 Legal Aspects of Chiropractic Health Care

2.00 credits (30 hours): 30 lecture hours

Overview of the legal environment of chiropractic service. Topics include malpractice, the chiropractic report, contracts, legal entities, direct and cross examination, chiropractic statutes, scope of practice and ethics. Material covers the statutes and ethics that govern chiropractic practice, how to legally begin business, how to prepare a legal case report, and how to obtain malpractice insurance.

25380 Maternal and Infant Health

2.00 credits (30 hours): 30 lecture hours

This course covers the physiologic and biomechanical changes normal to pregnancy. Those behaviors that maximize health in pregnancy for the mother and her unborn child will be addressed in depth. Health aspects of the first year of life are discussed.

26170 Mental Health 1

3.00 credits (45 hours): 30 lecture hours;

1 credit of directed independent study

Examination of important psychological theories, assessment tools, and conditions. Discussion of common presentations of psychological disorders, how to screen for these conditions in the chiropractic office, and fundamentals of treatment. Diagnostic categories and syndromes are reviewed.

26280 Mental Health 2

3.00 credits (45 hours): 30 lecture hours;

1 credit of directed independent study

Prerequisite: Mental Health 1

The student will develop his/her own unique theory of helping by looking at different styles of doctor-patient relationships, issues of professional boundaries, and attributes of an effective

helping relationship. Development of skill, knowledge, and attitudes necessary for influencing patient recovery and maintaining the mental health of the patient and chiropractic clinician is discussed.

33010 Methods 1: *Analysis Skills 1*

1.00 credit (30 hours): 30 laboratory hours

The fundamental terminology and skills used by the chiropractor during patient assessment (PARTS) are introduced, including patient observation and postural assessment, visual recognition and palpation of topographical landmarks, segmental motion palpation and the physical and radiographic recognition of vertebral dysrelationships.

33120 Methods 2: *Analysis Skills 2*

2.00 credits (45 hours): 15 lecture hours;
30 laboratory hours
Prerequisite: Methods 1

Development and integration of skills necessary to detect various manifestations of spinal subluxation and/or dysfunction, including static and motion palpation (active, passive, end feel), radiographic marking and mensuration, and postural examination.

33230 Methods 3: *Cervical and Thoracic Manual Therapies*

3.25 credits (75 hours): 22.5 lecture hours;
52.5 laboratory hours
Prerequisite: Methods 2

Introduction to applied adjustive procedures using high velocity, low amplitude thrusts in the cervical and thoracic regions. Methods derived from various technique systems (e.g. Gonstead, Thompson, Faye, Diversified) are practiced under direct supervision after PARTS evaluation has identified segments for which adjustments are indicated.

33340 Methods 4: *Lumbopelvic Manual Therapies*

3.25 credits (75 hours): 22.5 lecture hours;
52.5 laboratory hours
Prerequisite: Methods 3

Introduction to applied adjustive procedures using high velocity, low amplitude thrusts in the lumbar and pelvic regions; continued development of same in the cervical and thoracic regions. Methods derived from various technique systems (e.g. Gonstead, Thompson, Faye, Diversified) are practiced under direct supervision after PARTS evaluation has identified segments for which adjustments are indicated.

34150 Methods 5: *Practicum 1*

2.00 credits (45 hours): 15 lecture hours;
30 laboratory hours
Prerequisite: Methods 4

Continued development of psychomotor skills introduced in previous methods courses, with emphasis on modifications necessary to fit specific doctor and/or patient needs. Management strategies of common axial and appendicular conditions are discussed and practiced.

34260 Methods 6: *Practicum 2*

2.00 credits (45 hours): 15 lecture hours;
30 laboratory hours
Prerequisite: Methods 5

Continued development of chiropractic diagnostic and adjustive skills used in previous courses. Complete management strategies of common axial and appendicular conditions are discussed and practiced. Emphasis is given to modification necessary to fit specific doctor-patient needs.

Varies Methods 7: *Selectives*

2.00 credits (45 hours): 15 lecture hours;
30 laboratory hours
Prerequisite: Completion of Methods 1 through 6

The capstone of the Methods sequence is a selection of mini-courses in various techniques. Students are required to complete two such mini-courses to satisfy their Methods 7 requirement. Selectives vary by term: offerings include Activator Methods, Structure-based spinal and extremity techniques, flexion-distraction and passive motion techniques, advanced motion assessment techniques, advanced soft tissue techniques, upper cervical specific techniques, and adjustments/manipulation variants.

16040 Microbiology

5.00 credits (90 hours): 60 lecture hours;
30 laboratory hours
Prerequisite: Biochemistry 1
Recommended: Pathology 1, Histology 2

The theoretical and practical basis of clinical microbiology: structure, classification, genetics, control, cultivation, and identification of typical species of bacteria, viruses, fungi, and parasites. The normal immune defenses and pathological interactions between microbes and human host are stressed.

21140 Neurodiagnosis

3.00 credits (56.25 hours): 30 lecture hours;
22.5 laboratory hours; 0.25 credits of directed
independent study
Prerequisites: Neuroscience 1; Neuroscience 2

Discussion of the presentation, diagnosis and treatment of common disorders and complaints of the peripheral and central nervous systems. Students practice diagnostic techniques and treatment procedures, and discuss how doctors of chiropractic can participate in the management of patients who have nervous system disorders.

12120 Neuroscience 1: *Peripheral Nervous System*

4.00 credits (60 hours): 60 lecture hours
Prerequisite: Gross Anatomy 1
Corequisite: Physiology 1

In-depth study of the organization of the nervous system followed by a detailed study of neurophysiology, including receptor pharmacology; spinal nerves, with major emphasis on visceral and somatic afferent and efferent PNS pathways; reflex arcs; common segmental innervations, and dermatomes.

12230 Neuroscience 2: *Central Nervous System*

3.00 credits (45 hours): 45 lecture hours
Prerequisite: Gross Anatomy 1 and 2

The anatomy and function of the brain and spinal cord.

36030 Neuromusculoskeletal System 1:
Principles and Overview

3.00 credits (45 hours): 45 lecture hours
Prerequisites: Spine and Pelvis, Skeletal Radiology 1,
Neuroscience 1
Corequisite: Physical Diagnosis

Discussion of the integral relationship between N.M.S. structure and function and the healthy function of all other body systems and organs. Introduction to the evaluation and treatment of N.M.S. responses to common postural and traumatic insults and to pathologies in the neuromusculoskeletal system and other body systems. Students practice diagnostic and treatment procedures, and discuss how chiropractors can participate in the management of patients who have N.M.S. disorders.

36140 Neuromusculoskeletal System 2: *Spinal Disorders*

4.50 credits (75 hours): 60 lecture hours;
15 laboratory hours
Prerequisites: NMS 1; Physical Diagnosis;
Skeletal Radiology 2

Discussion of the presentation, diagnosis, and treatment of spinal and paraspinal conditions and complaints. Students practice diagnostic and treatment procedures, and discuss how doctors of chiropractic can participate in the management of patients who have spinal and paraspinal disorders.

34540 Neuromusculoskeletal System 3: *Extremity Disorders*

4.50 credits (90 hours): 30 lecture hours;
45 laboratory hours; 1.0 credits of directed
independent study
Prerequisites: NMS 1; Gross Anatomy 1 and 2;
Physiology 1 and 2

Discussion of the biomechanics of the extremities; the presentation, diagnosis, and treatment of common complaints and disorders. Students practice diagnostic and treatment procedures, including adjustments and manipulations, and discuss how doctors of chiropractic can participate in the management of patients with extremity disorders.

17030 Pathology 1

3.00 credits (45 hours): 45 lecture hours
Prerequisites: Histology 1 and 2; Biochemistry 1

Concepts of general pathology including cellular and tissue reactions to injury, mechanisms of inflammation, role of complement, immunology, hypersensitivity, concepts of neoplasia and hemodynamic disorders.

17140 Pathology 2

3.00 credits (45 hours): 45 lecture hours
Prerequisite: Pathology 1

Study of the pathologic changes in specific body organs and systems in autoimmune, environmental, infectious, degenerative and neoplastic diseases.

41040 Patient Interviewing

1.00 credit (15 hours): 15 hours lecture
Prerequisites: Professional Issues, Physical
Diagnosis

Examines all areas of patient interviewing, such as record keeping, problem-oriented history taking, narrative format histories, nonverbal communication, and patients with special problems. Small group sessions involving interviews of simulated patients are utilized.

25980 Pharmacology

2.00 credits (30 hours): 30 lecture hours

Major drug classifications and their most common applications. The rationale for pharmacological intervention in common disorders. Discussion of patient compliance issues, drug abuse, drug side effects and adverse reactions, and basic concepts regarding pharmacodynamics and kinetics, the therapeutic window, and toxicity.

21030 Physical Diagnosis

4.00 credits (75 hours): 45 lecture hours;
30 laboratory hours
Prerequisites: Gross Anatomy 1 and 2;
Physiology 1
Corequisite: Physiology 2

Students learn and practice assessment, with emphasis on performing and interpreting comprehensive physical examination procedures of the non-neuromusculoskeletal systems in the adult patient.

35151 Physiological Therapeutics 1: *Modality Applications*

2.25 credits (52.5 hours): 15 lecture hours;
37.5 laboratory hours

Theories and application of heat, cold, traction, and electrical modalities as adjuncts to patient management. Discussion of indications, contraindications, and modifications of physiological therapeutics based on various conditions and situations.

33561 Physiological Therapeutics 2: *Soft Tissue Techniques*

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

The primary focus of this course is the rehabilitation of damaged soft tissue that occurs with injuries frequently encountered by chiropractic clinicians. Methods to decrease

pain, increase range of motion, increase muscle strength and endurance as well as increasing aerobic health are discussed.

35170 Physiological Therapeutics 3:
Exercise and Rehabilitation

1.50 credits (30 hours): 15 lecture hours;
15 laboratory hours

Discussion of the role of exercise in the comprehensive conservative management of commonly encountered conditions. Principles of exercise therapy and exercise psychology. Concepts and skills relative to exercise techniques, and emphasis on spinal stabilization. Specific protocols regarding the prescription of exercise.

11120 Physiology 1

4.50 credits (75 hours): 60 lecture hours;
15 laboratory hours
Corequisite: Neuroscience 1
Recommended: Gross Anatomy 2, Histology 2

Study of cell membrane physiology and electrophysiology. Survey of the physiology of neuronal functions: in-depth study of skeletal, smooth and cardiac muscle physiology. The electrocardiogram, blood groups, hemostasis, and hemodynamics.

11230 Physiology 2

4.50 credits (75 hours): 60 lecture hours;
15 laboratory hours
Prerequisites: Physiology 1 or instructor consent;
Biochemistry 1

The function of vascular, digestive, respiratory, urogenital, and endocrine systems.

31010 Principles and Philosophy 1:
History and Fundamentals of Chiropractic

1.00 credit (15 hours): 15 lecture hours

A history of chiropractic and the other healing arts, including the evolution of fundamental chiropractic theories and concepts. The role and scope of practice of doctors of chiropractic in today's health care system. Introduction to principles of chiropractic diagnosis and treatment.

31120 Principles and Philosophy 2:
Essential Principles of Chiropractic

2.00 credits (30 hours): 30 lecture hours
Prerequisite: Principles & Philosophy 1

The scientific tenets that guide the philosophy of chiropractic health care are discussed, with emphasis on the concepts that alterations of body structure can influence neurological function, which in turn can impact body physiology and homeostatic balance.

37030 Principles and Philosophy 3:
Survey of Chiropractic Techniques

2.00 credits (30 hours): 30 lecture hours

Discussion and critical appraisal of chiropractic technique systems. Emphasis is on the person who developed each technique, the biomechanical principles upon which it is based, and how patients are evaluated and treated using the technique. The current research status of each technique is also discussed.

22040 Principles and Philosophy 4:
Chiropractic Science and Practice

2.00 credits (30 hours): 30 lecture hours

Discussion of current scientific literature regarding chiropractic principles and philosophy of the subluxation model. Neuromusculoskeletal and visceral conditions are discussed with the subluxation model of facilitation and adaptation in mind. Particular emphasis is placed on evidence related to the reciprocal influence between dysfunction of the neuromusculoskeletal system and related dysfunction in other systems. The influences of subluxation and the effects of chiropractic care and the adjustment on the health of the entire body are also stressed.

24760 Principles and Philosophy 5: *Professional Ethics*

1.00 credit (15 hours): 15 lecture hours

Presentation of key ethical issues encountered in the professional setting. Emphasis is on those issues commonly occurring in the chiropractic patient care environment.

32030 Principles of Evidence-Based Health Care

1.00 credit (15 hours): 15 lecture hours

This course provides an introduction to clinical decision-making using the "best" available evidence. Students will

learn to pose relevant questions, locate and search appropriate sources of information and appraise their methodological quality. Accordingly, students will be introduced to commonly encountered research designs and statistical principles used to answer questions encountered on a clinical and professional level.

22510 Professional Issues

0.50 credit (8 hours): 8 lecture hours

Introduction to becoming a professional. Discussion of the qualities that patients look for in a doctor, the development of those qualities, and the initiation of the doctor-patient relationship. Students discuss issues pertaining to boundaries, personal and cultural values, as well as professional responsibilities in academic and clinical settings.

25250 Public and Preventive Health

2.00 credits (30 hours): 30 lecture hours

Introduction to major public health concepts and topics, with delineation of the role and responsibilities of the chiropractic physician.

20460 Radiation Physics and Safety

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

Introduction to the safe production of quality radiographs. Students discuss the physics of X-ray production, the principles of radiobiology and radiation protection, and regulations regarding the use of ionizing radiation equipment as typified by those of the Minnesota Department of Health.

20570 Radiographic Technology and Positioning

1.50 credits (30 hours): 15 lecture hours;
15 laboratory hours

Prerequisite: Radiation Physics and Safety

Learn and practice the skills necessary to produce diagnostic radiographs of skeletal and related body components, including measurement, positioning, radiation protection, technique factor calculation, and equipment set-up and operation. Emphasis is on the projections commonly used in chiropractic practice.

20661 Radiology of the Chest and Abdomen

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

Corequisites: Cardiopulmonary System;
Gastrointestinal/Genitourinary Systems

Differentiation of normal from abnormal radiographic anatomy of the chest and abdomen using plain film. Correlation of X-ray findings with patient history, exam and lab findings. Discussions of the uses of and indications for advanced imaging techniques such as intravenous pyelography, barium studies, ultrasonography, computerized tomography, and magnetic resonance imaging.

20010 Skeletal Radiology 1

1.50 credits (30 hours): 15 lecture hours;
15 laboratory hours

Corequisites: Spine and Pelvis; Gross Anatomy 1

Identification of radiographic projections and normal radiographic anatomy and selected developmental variants of the spine, extremities, chest, and abdomen.

20130 Skeletal Radiology 2

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

Prerequisite: Skeletal Radiology 1

Assessment of spinal biomechanics, congenital anomalies and normal variants, with emphasis on correlation of radiographic findings with patient history, exam and lab findings. Discussion of various methods of chiropractic X-ray marking and measurement, and the benefits and limitations of each as supported by current literature.

20240 Skeletal Radiology 3

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

Prerequisites: Skeletal Radiology 1 and 2

Radiographic interpretation of skeletal trauma using a regional approach. Presentation of degenerative, inflammatory and metabolic arthritides. Correlation of radiographic findings with those from patient history and physical examination and lab. Discussion of various concerns regarding case management.

20350 Skeletal Radiology 4

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours

Prerequisites: Skeletal Radiology 1, 2 and 3

Discussion of neoplastic, infectious and metabolic diseases and their associated radiographic findings. Skeletal dysplasias, hematologic and nutritional disorders will be covered. Emphasis will be on correlating anatomic-clinical-radiological findings, with appropriate discussion of physical exam, laboratory, and diagnostic imaging findings. Indications for and routes of appropriate referral for follow-up will be discussed.

34010 Spine and Pelvis

3.00 credits (45 hours): 45 lecture hours

Introduction to the functional anatomy of the spinal column and pelvis. Special consideration is given to highlight areas that are of clinical importance to chiropractic. This course is intended to form a foundation for clinical science courses.

23570 Women's Health

2.25 credits (37.5 hours): 30 lecture hours;
7.5 laboratory hours

Prerequisite: Physical Diagnosis

Emphasis on lifestyles and behaviors which enhance and promote health in women. The unique aspects of caring for women are discussed. Introduction to breast and pelvic examination. Discussion of chiropractic and medical management of women's health problems.

ELECTIVES

56055 E.M.T. - Basic

2.50 credits (60 hours): 15 lecture hours;
45 laboratory hours

Prerequisites: Emergency Procedures, current First Responder Certification; current Healthcare Provider CPR Certification

A continuation of Emergency Procedures, this course further addresses the assessment and management of emergency patients, including medication administration and transportation of patient to medical facilities. Also provides students with training in advanced airway management and IV set-up. This course consists of lecture, skill practice and clinical experience at a local hospital. This course is approved by the Minnesota Emergency Medical Services Regulatory

Board. Participants who successfully complete the course will be eligible to take the National Registry of E.M.T.'s practical and written examinations.

56023 Meridian Therapy 1

2.00 credits (30 hours): 30 lecture hours
Prerequisite: Completion of all Trimester 1 and 2 courses

Introduction to the underlying principles and historical development of acupuncture and other forms of meridian therapy, and to concepts such as Qi, yin-yang, meridians, and points. Students learn current Western thinking regarding the physiological basis of acupuncture, clinical research supporting its use, and the training and credentials of various meridian therapy practitioners. Students also learn the location of important meridians and of cardinal points.

56024 Meridian Therapy 2

2.00 credits (30 hours): 30 lecture hours
Prerequisite: Meridian Therapy 1

Continued development of meridian and point location skills. Students learn about the various methods of applying meridian therapy (acupressure, electroacupuncture, laser, moxibustion, and needles), how to select points for common conditions, and about contraindications and adverse reactions.

56025 Meridian Therapy 3

2.00 credits (45 hours): 15 lecture hours,
30 laboratory hours
Prerequisites: Meridian Therapy 1 and 2

Students learn how to apply safe needle technique. Continued development of point location and selection of skills and meridian therapy techniques, with a focus on commonly encountered patient complaints and conditions. Students learn about state laws governing scope of practice and about third-party reimbursement for acupuncture.

BACCALAUREATE RESEARCH COURSES

SQS3901 Health Sciences Research 1: *Numerical Reasoning*

2.00 credits (30 hours): 30 lecture hours
Prerequisite: College-level algebra or instructor permission

The purpose of this course is to help students make intelligent decisions based on the analysis of numerical information. The course examines basic concepts of data sets, data organization, and elementary analysis.

SQS3902 Health Sciences Research 2: *Research Design*

2.00 credits (30 hours): 30 lecture hours
Prerequisite: Health Sciences Research 1

This course is a continuation of Health Sciences Research 1. Topics include sampling, measurement issues, statistical analysis, and interpretation of results.

SQS3903 Health Sciences Research 3: *Evaluating Health Information*

1.00 credit (15 hours): 15 lecture hours
Prerequisite: Health Sciences Research 2 or instructor permission

This course addresses the reliability of health information on the Internet and in the media from both consumer and professional perspectives. Methods for evaluating peer reviewed research articles and meta-analyses are presented.

SQS4971 Comprehensive Project Development

1.00 credit (15 hours): 15 lecture hours
Prerequisite: Completion of Health Sciences Research 1, 2 and 3

Research questions will be identified and research designs to answer the questions will be explored. Issues involving human subject research will be discussed.

SQS4972 Comprehensive Project in Human Biology

3.00 credits in directed independent study
Prerequisite: Comprehensive Project Development

Students complete a comprehensive project in human biology under the supervision of a faculty advisor.

SQS4973 Continuous Registration: *Comprehensive Project in Human Biology*

0.00 credits
Prerequisite: Comprehensive Project in Human Biology

This is a continuation of the comprehensive project during the student's final term in residence.



Northwestern is the only institution in the upper Midwest which offers **master's degrees** in both Oriental medicine and acupuncture.



LEADING Master's Program:

The Minnesota College of Acupuncture and Oriental Medicine

STATEMENT OF PURPOSE

The purpose of Minnesota College of Acupuncture and Oriental Medicine (M.C.A.O.M.) at Northwestern Health Sciences University is to offer professional, accredited Master's degree programs in acupuncture and Oriental medicine, graduating practitioners who are committed to competent and compassionate patient care. In so doing, we support and promote the growth of acupuncture and Oriental medicine and their integration into the healthcare system of the U.S.

PHILOSOPHY

At M.C.A.O.M., we believe a good health care practitioner is distinguished by:

- A broad range of relevant knowledge and skills;
- Demonstrated ability to translate education into clinical practice;
- Sensitivity to the individual patient's needs;
- Appreciation of the patient as a whole person;
- A centered and caring style within professional boundaries;
- A well-developed sense of professional ethics; and
- Appreciation of skills available from other professions.

Minnesota College of Acupuncture and Oriental Medicine is based on the fundamental philosophy of the importance of treating the whole person in the integration of mind, body and spirit.

GOALS

These activities are necessary to fulfill our purpose:

1. Convene a faculty of experts in their respective fields who are also skilled educators.

2. Provide accredited programs that meet national educational standards and reflect the College's unique character as part of a multi-disciplinary University of Health Sciences;

3. Recruit a student body with the academic skills, maturity and personal commitment that will help them develop into competent and caring practitioners;

4. Maintain a learning environment and academic standards that will ensure that students can acquire the knowledge, skills and attributes necessary for the competent and responsible practice of acupuncture and Oriental medicine;

5. Provide a clinical internship with adequate patient numbers and individualized supervision, enabling students to gain experience in the practical application of their knowledge and skills, preparing them for independent practice;

6. Provide continuing education for our graduates and other practitioners in the community;

7. Bring Oriental medicine to the general population by way of public education and the offering of affordable services through the teaching clinic; and

8. Be responsive to the needs of the community and to be ready to develop new programs as needed, to encourage public service, and to support and cooperate with other persons or institutions with similar goals and standards.

PROGRAMS OF STUDY

M.C.A.O.M. offers two programs, leading to the degrees Master of Acupuncture and Master of Oriental Medicine.

The Master of Oriental Medicine program is a full-time day program that may be completed in three calendar years (averaging about 25 hours per week) and by attending nine consecutive trimesters.

The Master of Acupuncture program can be completed in two and two-thirds calendar years in a full-time day schedule and by attending eight consecutive trimesters

EDUCATIONAL OBJECTIVES

A graduate of M.C.A.O.M. will be able to:

1. Demonstrate a thorough knowledge of Oriental medical theory and apply that knowledge effectively in a clinical setting;
2. Demonstrate appropriate skills in diagnosis, treatment planning, and treatment, including appropriate referral;
3. Approach the diagnostic and treatment planning process with appreciation for the patient as a whole person rather than as a collection of symptoms;
4. Demonstrate professional ethical behavior;
5. Demonstrate sufficient knowledge of Western medicine and sufficient competency in Western medical screening to make appropriate referrals and be able to communicate and collaborate with Western medical practitioners;
7. Pass National Board examinations and be eligible for licensing and practice in Minnesota;
8. Design a professional plan for clinical practice following graduation; and
9. Demonstrate competence, compassion and care in the service of patients.

ADMISSIONS

Admission to the College

Northwestern admits as students men and women of good character who are qualified by previous education and experience to meet its academic challenges and to become a practicing practitioner of acupuncture and Oriental medicine. New students are admitted at the beginning of two trimesters of the academic year: September and January. Transfer students may also be admitted at those times. (See "Transfer Application" section.)

Applications for admission are available online on our web site at www.nwhealth.edu or they may be obtained by contacting the Office of Admissions. The application for admission

must be accompanied by a non-refundable application processing fee of \$50 (U.S. dollars). It is the responsibility of the applicant to read this catalog and comply with all provisions and instructions.

Entrance Requirements

Admission requirements for the Master of Acupuncture and Master of Oriental Medicine programs include satisfactory completion of at least two academic years (60 semester credits or 90 quarter credits) at the baccalaureate level in an institution accredited by an agency recognized by the U.S. Secretary of Education. This education must be appropriate preparation for graduate-level work. Certification in a medical profession requiring at least the equivalent training of a registered nurse or a physician's assistant is also acceptable.

Beginning in September 2002 the following must be part of the 60 semester credits required for entrance:

Subject	Description	Sem. Credits
Humanities	<i>History, Political Science, Science, Anthropology, Religion, Philosophy, and Sociology</i>	15
English/Communication	<i>Composition, Literature, Skills and Speech</i>	6
Psychology	<i>General/Principles of Introduction to Psychology</i>	3

These courses must be passed with a grade of "C" or better. Courses in chemistry, biology, Asian Studies and Chinese language are strongly recommended. Applicants must have earned a cumulative G.P.A. of at least 2.0 on a 4.0 scale. Applicants should realize that this is a minimum. To ensure acceptance, a more competitive grade point is desirable.

Qualifications

Students must demonstrate sufficient maturity to undertake a health care profession, including the capacity to ethically and responsibly manage professional boundaries.

A student must possess the following abilities, with or without reasonable accommodation, for completion of the Master of Acupuncture or Master of Oriental Medicine degree program:

1. Ability to apply acupuncture and accessory techniques such as cupping, moxibustion and tui na, including but not limited to standing, leaning, reaching, stooping, kneading, grasping, twisting both body and wrists, and applying pressure with hands, over the full range of a patient's body, utilizing appropriate physical positioning in relation to the patient, for periods of up to one hour without interruption;
2. Ability to precisely place acupuncture needles in a patient's body and manipulate needles within a minute range of motion;
3. Ability to see and hear, with or without reasonable accommodation, sufficient that a student can identify histologic, cytologic, microbiologic and pathologic structures through a microscope; conduct patient intakes; interview patients; elicit necessary diagnostic indicators; maintain patient records; provide instructions to patients; perform stethoscopic and other auscultatory examinations; and provide routine patient safety services;
4. Ability to perform in all laboratory and clinical settings without posing a threat to herself/himself, to the safety and well-being of fellow students, or to patients;
5. Ability and willingness to receive acupuncture and accessory treatment. *Much of the technical instruction in the programs requires reciprocal application of the techniques of acupuncture and Oriental medicine, such as acupuncture needling, moxibustion, tui na bodywork, etc. In reciprocal laboratory experiences, receiving techniques is necessary in order to learn proper procedures, to receive and provide learning feedback, reciprocal application of technique is also useful for developing sensitivity to patient needs. The College may temporarily excuse a student from receiving acupuncture or other modalities provided that there is a specific medical contraindication, as determined in writing by a licensed medical professional.*

In addition to the abilities required of students in the Master of Acupuncture program (stated above), a student must possess the following abilities, with or without reasonable accommodation, for completion of the Master of Oriental Medicine degree program:

6. Ability to identify the odors, tastes, colors and other physical properties of herbs and other organic and mineral substances utilized in Oriental medical therapy;
7. Ability to document and prepare herbal formulae, in accordance with Oriental medical therapeutic principles, including but not limited to reading, writing, chopping, reaching, mixing, and grasping.

All students, with or without reasonable accommodation, must carry out laboratory and clinical assignments, including microscopic work and diagnostic interpretation. Qualified persons with disabilities, with or without reasonable accommodation, must be able to pass oral, written and practical examinations and meet all of the clinical requirements of the University.

It is in the best interests of both the student and the University to assess the degree of limitation caused by disability. However, the University will make the final determination of whether or not an individual meets all qualifications for study at the University.

Persons who have been convicted of any felony or misdemeanor of a violent or sexual nature may be prohibited from professional health care practice in many jurisdictions. Northwestern Health Sciences University can deny admission to applicants with such convictions. The University may conduct a criminal background check on applicants.

Responsibility of Applicant

It is the responsibility of the applicant to be aware of the entrance requirements and to ensure that they are met prior to enrollment. If the College determines at any time that requirements are not met in full, the student will not be allowed to enroll or to continue at Northwestern.

Minnesota Immunization Requirement

All students born in 1957 or later must comply with the Minnesota State College Immunization Law (Minn. Stat. 135A.14). You must show DPT immunization within the last 10 years; and measles, mumps, and rubella immunization after your first birthday. However, exemptions are permitted for philosophical or medical reasons. Further information is included with letters of acceptance to Northwestern.

Some clinical environments outside the University Clinic system may establish immunization and/or health screening requirements exceeding the Minnesota State College Immunization Law. In addition, some clinical environments outside the University Clinic system may not accept placement of interns who have not received or are not in the process of receiving certain immunizations and/or health screenings.

Application Procedure

The first step is to submit a fully completed application for admission. You may obtain an application from the Office of Admissions. The application must include:

1. An application processing fee of \$50 (U.S. dollars). This fee is non-refundable.
2. Official transcripts from all colleges attended must be sent directly to Northwestern from those colleges.
3. Names and addresses of two references. Northwestern will send character reference forms to those references listed on the application, who should then complete the form and return it to the University. Relatives are not accepted as references.
4. A completed essay (see application form for instructions).
5. A current resumé.

Applicants will be notified in writing of the Admissions Committee's decision regarding their application following receipt of all application materials and committee review. Upon notification of acceptance, a non-refundable tuition deposit of \$300 (U.S. dollars) is required to secure a place in the program. The tuition deposit is applied to the first trimester tuition.

Selection of Candidates

The Admissions Committee in general seeks to matriculate students who best suit the philosophies and goals of the University. Northwestern attempts to select students who have strong academic records and who demonstrate the motivational and personal characteristics suitable for a career in acupuncture and Oriental medicine. Service and a caring attitude are important characteristics of a successful practitioner. The University employs a rolling admissions process; therefore, early application could increase the applicant's probability for acceptance. Students are highly recommended to apply for the Minnesota College of Acupuncture and Oriental Medicine at least two months before the first day of their first academic term. Students interested in seeking transfer credit or advanced standing should apply as far in advance as possible, in order to assure that any required challenge examinations can be completed prior to the first day of class. The University encourages campus visits for all applicants and reserves the right to require an interview.

Tuition Deposit Policy

Applicants will be notified in writing of the Admission Committee's decision regarding their application following receipt of all application materials and committee review. Upon notification of acceptance, a candidate must remit a tuition deposit of \$300 (U.S. dollars) to reserve a position in the entering class. This tuition deposit is non-refundable but is applied toward the first trimester tuition. The tuition deposit should be submitted after notification of acceptance since processing of financial aid is initiated only after receipt of the tuition deposit.

First trimester students who have been accepted and paid their \$300 (U.S. dollars) tuition deposit must pay the balance of their first trimester tuition on the first day of class. If the student has a Stafford Loan in progress for the first trimester at Northwestern, then the first trimester tuition will be credited against this loan. It is important to note that because of the limited space available in each class, scheduling priorities, and the cost of education, the institutional refund policy does not apply to the \$300 (U.S. dollars) tuition deposit.

International Applicants

All classes are taught in English. A student may verify competency in English in the following manner:

1. Students from English-speaking countries (excluding the Canadian province of Quebec) may include with their application a copy of their birth certificate. Or, these applicants may complete an English competency verification form, which can be obtained from the Office of Admissions. We reserve the right to request proof of English proficiency of any applicant.
2. All other foreign applicants (including those from the Canadian province of Quebec) must complete a T.O.E.F.L. (Test Of English as a Foreign Language) examination. Applicants completing the paper-based examination must earn a score of 540 or higher. Applicants completing the computer-based examination must earn a score of 207 or higher. Results of the T.O.E.F.L. must be sent directly to Northwestern from the testing agency. T.O.E.F.L. information can be obtained online at www.toefl.org, or from: T.O.E.F.L., P.O. Box 6151, Princeton, NJ 08541-6151, U.S.A.

Students must provide evidence of having financial resources to complete a minimum of one year of education. An official bank statement indicating sufficient funds is required.

International transcripts must be evaluated by an international transcript evaluation service, such as World Education Services, Inc., (P.O. Box 745, Old Chelsea Station, New York, NY 10013) with official copies of the course-by-course evaluation being forwarded directly to both Northwestern and the student. Contact the Office of Admissions for a WES application form or names of other accepted transcript evaluation services.

Transfer Application

A student wishing to transfer from another acupuncture or Oriental medicine program must:

1. Follow the same application procedures as a new student (see admission process section in catalog).
2. Submit an official transcript from the acupuncture or Oriental medicine program(s) previously attended.
3. Submit two letters of recommendation from faculty members of the acupuncture or Oriental medicine program previously attended, as well as a letter from that college's registrar indicating the student applicant is leaving that college in good standing and could continue studies at their present acupuncture or Oriental medicine program.
4. The applicant's academic record must further allow for the student to be admitted without probation or other restriction, as defined by Northwestern policies.
5. Transfer credit may be granted for courses completed with a grade of "C" or better from another acupuncture or Oriental medicine institution. Those courses must have content similar to corresponding Northwestern courses of the same name and level. The Northwestern registrar will determine that comparability.
6. All credits that the student wishes to transfer to the Northwestern program must be applied for and posted to the applicant's Northwestern records prior to matriculation.
7. A transfer student must complete at least five trimesters of resident study in the Northwestern program prior to graduation.
8. Excessive indebtedness as a result of financial aid borrowing will be a factor in the Admissions Committee's decisions regarding acceptance of a transfer student. The Student Records and Financial Services Office will set upper limits of previous indebtedness.
9. These policies are subject to updating and modification. Contact the Office of Admissions for current information.

Transfer Credits Policy

At the discretion of the Academic Dean, credit may be granted for equivalent courses taken and passed in another program. Considerations may include the institution offering the courses, the course description and/or syllabus for each course, the length of time since completing the course and life experience. The student may be required to pass a challenge examination. There are three ways students can complete graduation requirements without taking every required course: Transfer Credit (for equivalent courses), Transfer Credit (for equivalent course/life experience), and Waivers of Requirement.

For Equivalent Courses

A transfer student must complete at least three trimesters of resident study in the Northwestern program prior to graduation. To be considered for transfer credits, courses must be equivalent to those offered at M.C.A.O.M. based on an evaluation of the student's official transcript by M.C.A.O.M.'s academic administration. A syllabus or other detailed course description and a copy of the catalog from the original institution may be required. Normally, the course must be an academic course from an accredited institution at the baccalaureate level or above and passed within the last five years with a grade of "C" or better. A grade of "C-" is not acceptable if the awarding college states that the numerical equivalent is less than 2.0 (when "A" is 4.0). If the institution is not accredited or the course not passed within the time frame allowed, (see below for life experience exception) the student must pass a challenge exam given by M.C.A.O.M. to have a transfer credit granted. Accreditation must be from an agency recognized by the U.S. Secretary of Education.

Equivalent Course/Life Experience

Transfer credit may be given to a student who has taken an equivalent course (which meets the above referenced standards) prior to the last five years, if life work or experience has enabled the student to use the skills learned in that course within the last 10 years, e.g. nurse, chiropractor, doctor, physical therapist, etc.

Maximum Transfer Credit

Transfer credit is granted for a maximum of the number of hours that the M.C.A.O.M. equivalent course earns. For example, a 180-hour course in Anatomy and Physiology from another school will be worth 135 hours or 9 credits, if 135 hours in the length of the M.C.A.O.M. course.

Waivers of Requirements

Occasionally, a waiver of requirement may be granted in lieu of a required course or course sequence. Credit will be given according to the above noted guidelines for maximum credit/hours allowed. Normally, a waiver of requirement is based on education or professional experience that may not be able to be documented to the extent required for transfer credit. A challenge exam may be required to demonstrate competency in the subject involved.

Non-Program Students

Space permitting, and subject to other conditions, persons who are not enrolled in a complete degree program are welcome to apply to take certain classes. Non-program students must meet the admissions requirements and have completed the prerequisites for the courses in which they are interested. Required as part of the application process is a plan of study, including purpose and rationale. Minnesota-licensed acupuncture practitioners are welcome to enroll in any course as continuing education.

GRADUATION

Diplomas and Graduation

Graduates under this catalog will be awarded the degree Master of Acupuncture or Master of Oriental Medicine, depending on the program completed.

Requirements for Graduation

The Master of Acupuncture or Master of Oriental Medicine degree is granted to those candidates who have:

- completed the required course of study, of which at least one academic year has been in residence at Northwestern Health Sciences University;
- satisfied the requirements of the class with which they will graduate;
- demonstrated competency in clinic and completed internship requirements;
- earned satisfactory (passing) grades in all required courses;
- fulfilled all financial obligations to the University; and
- had been recommended for graduation by the faculty.

CERTIFICATION AND LICENSURE

Graduates of M.C.A.O.M. master's degree programs exceed the eligibility requirements for the comprehensive national certifying examinations offered by the National Commission for the Certification of Acupuncture and Oriental Medicine (N.C.C.A.O.M.). Graduates of the Master of Acupuncture program qualify to take the acupuncture certification examination. Graduates of the Master of Oriental Medicine program are eligible to take the certification examinations in both acupuncture and Chinese herbology. Students agree to provide M.C.A.O.M. with copies of their N.C.C.A.O.M. examination results for use in program assessment.

Licensure requirements for the practice of acupuncture and Oriental medicine vary from state to state. In Minnesota, eligibility for acupuncture licensure is based upon active certification by the N.C.C.A.O.M. Additional information about Minnesota acupuncture licensure may be obtained from the Minnesota Board of Medical Practice, University Park Plaza, 2829 University Avenue SE, Suite 400, Minneapolis, MN 55414-3246.

MASTER OF ACUPUNCTURE AND MASTER OF ORIENTAL MEDICINE PROGRAMS

The programs are offered in an intensive, full-time day schedule. Students can complete the Master of Oriental Medicine program in three calendar years, averaging about 25 hours per week and attending nine consecutive trimesters. Students can complete the Master of Acupuncture program in two and two-thirds calendar years on the day schedule, attending eight consecutive trimesters. Students are accepted into the programs in the Fall and Winter trimesters, which begin in September and January, respectively.

THE PROGRAMS

Master of Oriental Medicine

The curriculum for the professional Master of Oriental Medicine program provides comprehensive education and training in the following areas:

- Cultural and philosophical foundations of Oriental medicine;
- Traditional Oriental medical concepts (physiology, pathology, diagnostics, point location and point energetics);
- Acupuncture treatment principles and practical skills;
- Tui Na;
- Traditional Chinese herbal medicine and traditional Oriental dietary therapy;
- Related studies, including introductory Chinese language skills;
- Qi Development / Qigong;
- Nutrition;
- Western medical studies to a level required for competence in contemporary practice of acupuncture and Oriental medicine;
- Clinical internship.

Clinical requirements include a minimum of 150 hours of observation (some including assistance) and 630 hours of supervised clinical practice in six registrations.

Master of Acupuncture

The curriculum for the Professional Master of Acupuncture program is similar to that for the Oriental medicine program but does not include herbal studies past an introductory level. Acupuncture Diversity courses, required of Master of Acupuncture students and elective for Oriental medicine students, provide extra training in acupuncture therapeutics. These courses familiarize students with traditions and styles of acupuncture and associated modalities that are outside of mainstream practice.

Clinical requirements include a minimum of 150 hours of observation (some including assistance) and 525 hours of supervised clinical practice in five registrations over four trimesters.

The M.C.A.O.M. Clinical Experience

M.C.A.O.M. students begin their clinical training in their second trimester, with Clinical Observation, and enter their clinical internship in the middle of their second year. The clinical internship takes place in the M.C.A.O.M. Edith Davis Teaching Clinic on the University campus and in the Natural Care Centers of Northwestern Health Sciences University, as well as in various clinical settings in public service organizations and medical facilities. Clinic interns perform patient care, closely supervised and evaluated by M.C.A.O.M. clinical faculty members. The exceptionally low intern-supervisor ratio ensures a high degree of personal attention. Interns are progressively given more responsibility for all aspects of patient care, until by the end of their internship they are ready to enter private practice.



MASTER OF ACUPUNCTURE DEGREE PROGRAM: COURSE LIST

First Year

Trimester 1

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4021	Acupuncture Point Location 1	1.50	45	0	45	0
AAC4022	Acupuncture Point Location 2	0.50	15	0	15	0
AAC3211	Chinese Medical Pathology & Diagnosis 1	2.00	30	30	0	0
AAC3200	Fundamentals of Chinese Medicine	3.00	45	45	0	0
AWM3011	Western Anatomy & Physiology 1	4.50	75	60	15	0
TOTALS:	Trimester 1, 1st year	11.50	210	135	75	0

Trimester 2

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4023	Acupuncture Point Location 3	1.00	30	0	30	0
AAC4024	Acupuncture Point Location 4	1.50	45	0	45	0
AAC3212	Chinese Medical Pathology & Diagnosis 2	1.00	15	15	0	0
AAC3213	Chinese Medical Pathology & Diagnosis 3	3.00	45	45	0	0
ACL3020	Clinical Observation	1.00	30	0	0	30
AWM0150	CPR	0.20	6	0	6	0
AHB3010	Introduction to Chinese Herbal Medicine	1.00	15	15	0	0
ACH3010	Introduction to Chinese Language	1.00	15	15	0	0
AWM3012	Western Anatomy & Physiology 2	2.50	45	30	15	0
TOTALS:	Trimester 2, 1st year	12.20	246	120	96	30

Trimester 3

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4250	Accessory Techniques	1.50	45	0	45	0
AAC4230	Acupuncture Treatment Strategy	3.00	45	45	0	0
ACL3020	Clinical Observation	1.00	30	0	0	30
AAC4241	Needling Technique 1	1.50	45	0	45	0
AAC4242	Needling Technique 2	0.50	15	0	15	0
AWM4031	Western Pathophysiology 1	2.00	30	30	0	0
TOTALS:	Trimester 3, 1st year	9.50	210	75	105	30
TOTALS FOR ALL TRIMESTERS, 1st year		33.20	666	330	276	60

Second Year*Trimester 4*

Course	Course Description	CR	HRS	Lec	Lab	Cln
ACL3020	Clinical Observation	1.00	30	0	0	30
ARS4040	Ethics in Health Care	1.00	15	15	0	0
AAC4243	Needling Techniques 3	1.00	30	0	30	0
AAC4244	Needling Techniques 4	1.50	45	0	45	0
AAC4030	Pre-Clinical Workshop	2.00	60	0	60	0
AWM4032	Western Pathophysiology 2	2.00	30	30	0	0
TOTALS:	Trimester 4, 2nd year	8.50	210	45	135	30

Trimester 5

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5151	Acupuncture Clinical Medicine 1	3.00	45	45	0	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL3020	Clinical Observation	1.00	30	0	0	30
ACL5050	Clinic Seminar	1.00	15	15	0	0
ARS5070	Introduction to Clinical Psychology	2.00	30	30	0	0
AAC5060	Tui Na	1.00	30	0	30	0
AWM4041	Western Medical Screening 1	2.00	30	30	0	0
AWM4042	Western Medical Screening 2	2.00	30	30	0	0
TOTALS:	Trimester 5, 2nd year	16.00	330	150	30	150

Trimester 6

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5152	Acupuncture Clinical Medicine 2	3.00	45	45	0	0
AAC5270	Acupuncture Diversity Survey	1.00	15	15	0	0
AAC4245	Advanced Needling Techniques	1.00	30	0	30	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL5050	Clinic Seminar	1.00	15	15	0	0
ARS5060	Interactive Skills	1.00	15	15	0	0
AWM5080	Pharmacology	2.00	30	30	0	0
AWM5071	Western Clinical Medicine 1	2.00	30	30	0	0
TOTALS:	Trimester 6, 2nd year	15.00	300	150	30	120
TOTALS FOR ALL TRIMESTERS, 2nd year		39.50	840	345	195	300

Third Year*Trimester 7*

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5153	Acupuncture Clinical Medicine 3	3.00	45	45	0	0
AAC5281	Acupuncture Diversity Therapeutics 1	0.75	15	8	7	0
AAC5282	Acupuncture Diversity Therapeutics 2	0.75	15	7	8	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL3020	Clinical Observation	1.00	30	0	0	30
ACL5050	Clinic Seminar	1.00	15	15	0	0
ARS6030	Critical Appraisal of the Literature	1.00	15	15	0	0
AAC5290	Musculoskeletal Acupuncture	1.50	45	0	45	0
AAC6160	Pharmacology & Oriental Medicine	1.00	15	15	0	0
AHB5130	Traditional Oriental Food Therapy	2.00	30	30	0	0
AWM5072	Western Clinical Medicine 2	2.00	30	30	0	0
TOTALS:	Trimester 7, 3rd year	18.00	375	165	60	150

Trimester 8

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5283	Acupuncture Diversity Therapeutics 3	0.75	15	8	7	0
AAC5284	Acupuncture Diversity Therapeutics 4	0.75	15	7	8	0
AAC6110	Acupuncture Review & Synthesis	2.00	30	30	0	0
AAC6220	Classics - The Nei Jing	2.00	30	30	0	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL6060	Clinical Internship – Acupuncture	1.50	45	0	0	45
ACL5050	Clinic Seminar	1.00	15	15	0	0
AWM0150	CPR	0.20	6	0	6	0
AWM5060	Nutrition	3.00	45	45	0	0
ARS5090	Practice Management	2.00	30	30	0	0
AWM5073	Western Clinical Medicine 3	2.00	30	30	0	0
AWM5074	Western Clinical Medicine 4	1.00	15	15	0	0
TOTALS:	Trimester 8, 3rd year	20.20	396	210	21	165
TOTALS FOR ALL TRIMESTERS, 3rd year		38.20	771	375	81	315
TOTALS FOR ENTIRE PROGRAM		110.90	2277	1050	261	675



MASTER OF ORIENTAL MEDICINE DEGREE PROGRAM: COURSE LIST

First Year

Trimester 1

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4021	Acupuncture Point Location 1	1.50	45	0	45	0
AAC4022	Acupuncture Point Location 2	0.50	15	0	15	0
AAC3211	Chinese Medical Pathology & Diagnosis 1	2.00	30	30	0	0
AAC3200	Fundamentals of Chinese Medicine	3.00	45	45	0	0
AWM3011	Western Anatomy & Physiology 1	4.50	75	60	15	0
TOTALS:	Trimester 1, 1st year	11.50	210	135	75	0

Trimester 2

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4023	Acupuncture Point Location 3	1.00	30	0	30	0
AAC4024	Acupuncture Point Location 4	1.50	45	0	45	0
AAC3212	Chinese Medical Pathology & Diagnosis 2	1.00	15	15	0	0
AAC3213	Chinese Medical Pathology & Diagnosis 3	3.00	45	45	0	0
ACL3020	Clinical Observation	1.00	30	0	0	30
AWM0150	CPR	0.20	6	0	6	0
AHB3010	Introduction to Chinese Herbal Medicine	1.00	15	15	0	0
ACH3010	Introduction to Chinese Language	1.00	15	15	0	0
AWM3012	Western Anatomy & Physiology 2	2.50	45	30	15	0
TOTALS:	Trimester 2, 1st year	12.20	246	120	96	30

Trimester 3

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC4250	Accessory Techniques	1.50	45	0	45	0
AAC4230	Acupuncture Treatment Strategy	3.00	45	45	0	0
ACL3020	Clinical Observation	1.00	30	0	0	30
AHB4021	Materia Medica 1	4.00	60	60	0	0
AAC4241	Needling Technique 1	1.50	45	0	45	0
AAC4242	Needling Technique 2	0.50	15	0	15	0
AWM4031	Western Pathophysiology 1	2.00	30	30	0	0
TOTALS:	Trimester 3, 1st year	13.50	270	135	105	30
TOTALS FOR ALL TRIMESTERS, 1st year		37.20	726	390	276	60

Second Year*Trimester 4*

Course	Course Description	CR	HRS	Lec	Lab	Cln
ACL3020	Clinical Observation	1.00	30	0	0	30
ARS4040	Ethics in Healthcare	1.00	15	15	0	0
AHB4022	Materia Medica 2	5.00	75	75	0	0
AAC4243	Needling Techniques 3	1.00	30	0	30	0
AAC4244	Needling Techniques 4	1.50	45	0	45	0
AAC4030	Pre-Clinical Workshop	2.00	60	0	60	0
AWM4041	Western Medical Screening 1	2.00	30	30	0	0
AWM4032	Western Pathophysiology 2	2.00	30	30	0	0
TOTALS:	Trimester 4, 2nd year	15.50	315	150	135	30

Trimester 5

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5151	Acupuncture Clinical Medicine 1	3.00	45	45	0	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL3020	Clinical Observation	1.00	30	0	0	30
ACL5050	Clinic Seminar	1.00	15	15	0	0
AHB5031	Herbal Formulas & Strategies 1	3.00	45	45	0	0
AHB5032	Herbal Formulas & Strategies 2	1.00	15	15	0	0
ARS5070	Introduction to Clinical Psychology	2.00	30	30	0	0
AAC5060	Tui Na	1.00	30	0	30	0
AWM4042	Western Medical Screening 2	2.00	30	30	0	0
TOTALS:	Trimester 5, 2nd year	18.00	360	180	30	150

Trimester 6

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5152	Acupuncture Clinical Medicine 2	3.00	45	45	0	0
AAC5270	Acupuncture Diversity Survey	1.00	15	15	0	0
AAC4245	Advanced Needling Techniques	1.00	30	0	30	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL5050	Clinic Seminar	1.00	15	15	0	0
AHB5033	Herbal Formulas & Strategies 3	2.00	30	30	0	0
AHB5034	Herbal Formulas & Strategies 4	3.00	45	45	0	0
ARS5060	Interactive Skills	1.00	15	15	0	0
AWM5080	Pharmacology	2.00	30	30	0	0
AWM5071	Western Clinical Medicine 1	2.00	30	30	0	0
TOTALS:	Trimester 6, 2nd year	20.00	375	225	30	120
TOTALS FOR ALL TRIMESTERS, 2nd year		53.50	1050	555	195	300

Third Year*Trimester 7*

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC5153	Acupuncture Clinical Medicine 3	3.00	45	45	0	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL3020	Clinical Observation	1.00	30	0	0	30
ACL5050	Clinic Seminar	1.00	15	15	0	0
ARS6030	Critical Appraisal of the Literature	1.00	15	15	0	0
AHB5091	Herbal Clinical Medicine 1	3.00	45	45	0	0
AAC5290	Musculoskeletal Acupuncture	1.50	45	0	45	0
AAC6160	Pharmacology & Oriental Medicine	1.00	15	15	0	0
AHB5130	Traditional Oriental Food Therapy	2.00	30	30	0	0
AWM5072	Western Clinical Medicine 2	2.00	30	30	0	0
TOTALS:	Trimester 7, 3rd year	19.50	390	195	45	150

Trimester 8

Course	Course Description	CR	HRS	Lec	Lab	Cln
AAC6110	Acupuncture Review & Synthesis	2.00	30	30	0	0
AAC6220	Classics - The Nei Jing	2.00	30	30	0	0
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL5050	Clinic Seminar	1.00	15	15	0	0
AWM0150	C.P.R.	0.20	6	0	6	0
AHB5092	Herbal Clinical Medicine 2	3.00	45	45	0	0
AWM5060	Nutrition	3.00	45	45	0	0
ARS5090	Practice Management	2.00	30	30	0	0
AWM5073	Western Clinical Medicine 3	2.00	30	30	0	0
AWM5074	Western Clinical Medicine 4	1.00	15	15	0	0
TOTALS:	Trimester 8, 3rd year	20.20	366	240	6	120

Trimester 9

Course	Course Description	CR	HRS	Lec	Lab	Cln
ACL6080	Clinical Internship - Oriental medicine	1.00	30	0	0	30
ACL5040	Clinical Internship	4.00	120	0	0	120
ACL5050	Clinic Seminar	1.00	15	15	0	0
AHB6060	Herbal Classics	3.00	45	45	0	0
AHB6050	Herbal Pharmacy Management	1.00	15	15	0	0
AHB6040	Herbal Review & Synthesis	4.00	60	60	0	0
TOTALS:	Trimester 9, 3rd year	14.00	285	135	0	150
TOTALS FOR ALL TRIMESTERS, 3rd year		53.70	1041	570	51	420
TOTALS FOR ENTIRE PROGRAM		144.40	2817	1515	522	780

COURSE DESCRIPTIONS

AAC4250 Accessory Techniques

1.50 credits (45 hours): 45 laboratory hours
Corequisite: AAC4241

Students apply common accessory techniques used by modern acupuncturists, including cupping, guasha, plum-blossom technique, bloodletting, moxibustion, auricular acupuncture, and electro-acupuncture.

AAC5151 Acupuncture Clinical Medicine 1

3.00 credits (45 hours): 45 laboratory hours
Prerequisites: AAC3213; AAC4024

This is the first course of a three course sequence in acupuncture clinical medicine. Students learn the traditional Chinese method of analyzing disease and determining treatment through differential diagnosis of main presenting symptoms. Case studies are presented to exemplify lecture material.

AAC5152 Acupuncture Clinical Medicine 2

3.00 credits (45 hours): 45 laboratory hours
Prerequisites: AAC5151

This is the second course of a three course sequence in acupuncture clinical medicine.

AAC5153 Acupuncture Clinical Medicine 3

3.00 credits (45 hours): 45 laboratory hours
Prerequisites: AAC5152

This is the final course of a three course sequence in acupuncture clinical medicine.

AAC5270 Acupuncture Diversity Survey

1.00 credit (15 hours): 15 laboratory hours
Prerequisites: AAC4024; AAC4230

Students will become familiar with the rich variety of acupuncture available around the world, by learning the broad features of a variety of traditions and styles of practice.

AAC5281 Acupuncture Diversity Therapeutics 1

0.75 credit (15 hours): 7-8 lecture hours;
7-8 laboratory hours
Prerequisites: AAC3212; AAC4024; AAC4244;
AAC4250; AAC5270

Students will explore a style or tradition of acupuncture chosen from outside mainstream practice.

AAC5282 Acupuncture Diversity Therapeutics 2

0.75 credit (15 hours): 7-8 lecture hours;
7-8 laboratory hours
Prerequisites: AAC3212; AAC4024; AAC4244;
AAC4250; AAC5270

Students will explore a style or tradition of acupuncture chosen from outside mainstream practice.

AAC5283 Acupuncture Diversity Therapeutics 3

0.75 credit (15 hours): 7-8 lecture hours;
7-8 laboratory hours
Prerequisites: AAC3212; AAC4024; AAC4244;
AAC4250; AAC5270

Students will explore a style or tradition of acupuncture chosen from outside mainstream practice.

AAC5284 Acupuncture Diversity Therapeutics 4

0.75 credit (15 hours): 7-8 lecture hours;
7-8 laboratory hours
Prerequisites: AAC3212; AAC4024; AAC4244;
AAC4250; AAC5270

Students will explore a style or tradition of acupuncture chosen from outside mainstream practice.

AAC4021 Acupuncture Point Location 1

1.50 credits (45 hours): 45 laboratory hours
Corequisite: AWM3011

This is the first course of a four-course laboratory sequence in point location. Students will learn the general pathways and functions of the twelve meridians, the principles and methods of palpation, and proportionate anatomical measurement. Students will begin developing appropriate sensitivity to a patient's limits regarding touch. Students will

begin learning the location and basic functions of all major acupuncture points, one meridian at a time. The Point Location sequence is taught in an interactive manner with visually-assisted demonstrations led by the instructor, coordinated group exercises, and supervised hands-on location with student pairs.

AAC4022 Acupuncture Point Location 2

0.50 credit (15 hours): 15 laboratory hours
Prerequisite: AAC4021

This is the second course of a four-course laboratory sequence in point location. Students continue to learn the location and basic functions of acupuncture points meridian-by-meridian.

AAC4023 Acupuncture Point Location 3

1.00 credit (30 hours): 30 laboratory hours
Prerequisite: AAC4022

This is the third course of a four-course laboratory sequence in point location. Students complete the comprehensive meridian-by-meridian location of points. Students re-examine point location in regions of the body that are supplied by several different meridians (as in the case of the face and shoulder). Extra points are also covered.

AAC4024 Acupuncture Point Location 4

1.50 credits (45 hours): 45 laboratory hours
Prerequisite: AAC4023

This is the final course of a four-course laboratory sequence in point location. Students re-examine points according to their locations in specific regions of the body, with attention to point function, as well as their grouping into traditional point categories. Students learn important clinical point combinations in the treatment of specific symptoms and Chinese medical patterns.

AAC6110 Acupuncture Review and Synthesis

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AAC5153; final year of educational program

This course allows students to consolidate, integrate, harmonize, and balance the entire learning experience, and reviews the essential components of the program.

AAC4230 Acupuncture Treatment Strategy

3.00 credits (45 hours): 45 lecture hours
Prerequisites: AAC3213; AAC4024

Students will learn the classical theories of meridian and point functions and apply them within the framework of modern Chinese acupuncture. Students will re-examine the function of meridians according to Five-Phase and Six-Level pairing systems. Students will learn to understand the functions of points according to their classical taxonomy, including Five Antique (Shu) Points, Luo Points, Eight Meeting Points, Yuan-Source Points, Intersection Points, etc. Students will learn how these classical theories are utilized in the selection of points for treatment of modern Chinese medical patterns.

AAC4245 Advanced Needling Techniques

1.00 credit (30 hours): 30 laboratory hours
Prerequisite: AAC4244

Students continue hands-on skill development in needle manipulation, closely supervised by a faculty member. Students focus on some of the most advanced and sophisticated classical needling techniques, some of which are only rarely seen in China today.

AWM3011 Anatomy and Physiology 1

4.50 credits (75 hours): 60 lecture hours;
15 laboratory hours

This is the first course in a two-course sequence concerning the anatomy and physiology of the human body, from a systems-based biomedical perspective. A biomedical understanding of the human body is required to safely interpret and apply Oriental medical concepts, to understand Western medical diagnoses, and to facilitate communication with patients and with Western medical practitioners. Students will learn the structure and function of the skeletal, muscular, nervous and integumentary systems. The laboratory experience will enhance student understanding of surface anatomy, in order to facilitate the study of point location. The laboratory experience includes observation of human cadavers.

2.50 credits (45 hours): 30 lecture hours;
15 laboratory hours
Prerequisite: AWM3011

This is the second course in a two-course sequence concerning the anatomy and physiology of the human body, from a systems-based biomedical perspective. Students will learn the structure and function of the cardiovascular, respiratory, gastrointestinal, genitourinary, endocrine and immune systems, and the sensory organs. The laboratory experience includes observation of human cadavers.

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AAC3200

This is the first course of a three-course series presenting the principles of pathology and pattern discrimination that underlie all Chinese medicine. Students will learn the Causes of Disease, Eight Parameter Pattern Differentiation, and disorders of Qi and Blood.

1.00 credit (15 hours): 15 lecture hours
Prerequisite: AAC3211

This is the second course of a three-course series presenting the principles of Chinese pathology and differential diagnosis. In this course, the students will learn to differentiate disease patterns of the Zang-Fu organs (Zang-Fu Bian Zheng).

3.00 credits (45 hours): 45 lecture hours
Prerequisite: AAC3212

This is the final course of a three-course series presenting the principles of Chinese pathology and differential diagnosis. The patterns of the Zang-Fu organs begun in Chinese Medical Pathology and Diagnosis 2 will be completed. The various systems of Febrile Disease (Re Bing) theory will be outlined, including Six-Level Pattern Differentiation (Liu Jing Bian Zheng), Four-Aspect Pattern Differentiation (Wei Qi Ying Xue Bian Zheng), and Three Burner Pattern Differentiation (San Jiao Bian Zheng). Students will expand their understanding of the Four Examinations and pulse and tongue diagnosis through class exercise.

2.00 credits (30 hours): 30 lecture hours
Prerequisites: AAC3212; AAC4024; AAC4230

Students become familiar with this famous medical classic and have the opportunity to review Chinese medical theory and its origins in the context of the greater underlying philosophy and world view of ancient China.

4.00 credit (120 hours): 120 clinical hours
(Repeatable)
Prerequisite: AAC4030; successful completion of clinical entrance examination

Under direct supervision of a licensed clinical faculty supervisor, interns perform diagnosis, treatment planning, treatment, and outcome evaluation in the teaching clinic.

1.00 credit (30 hours): 30 clinical hours (Repeatable)
Prerequisite: AAC3200

In the beginning of their clinical education, students are required to observe supervisors, senior interns, and graduates caring for patients in the school's teaching clinics. Once they have become familiar with the operations of the clinics, observers are asked to provide assistance with general clinical tasks. Observation opportunities may occur in the Edith Davis Teaching Clinic, other University clinics, community health and community service settings, or within a structured clinical theater setting.

1.00 credit (15 hours): 15 lecture hours (Repeatable)
Corequisite: ACL5040

During each term of clinical internship, students participate in weekly group case-study sessions. Students research and present cases for discussion among students present and the clinical faculty member in charge, with particular reference to complex or difficult cases. These sessions are also the forum where general issues of patient care and clinical protocols may be periodically reviewed, with the goal of continuous improvement of clinical services and intern clinical experience.

0.20 credit (6 hours): 6 laboratory hours

Students are required to obtain provider-level C.P.R. certification unless they have specific physical impediments. Certification may be accomplished by successful completion of this course. If C.P.R. certification is obtained elsewhere, the student must supply evidence of certification, and transfer credit will be granted. The course is usually held on a Saturday.

ARS6030 Critical Appraisal of the Literature

1.00 credit (15 hours): 15 lecture hours

Students learn to manage and utilize information generated from health care research, including peer-reviewed journal articles, professional and consumer-oriented media, and Internet content, through structured appraisal techniques. Students learn to identify problems in methodology that impact the credibility and utility of information, and learn to assess the reliability of information sources.

ARS4040 Ethics in Health Care

1.00 credit (15 hours): 15 lecture hours

Students learn basic ethical principles as a foundation for problem-solving in health care practice. The Code of Ethics of the acupuncture profession forms the framework for exploring details of how ethics are applied in relation to state regulations, patient confidentiality, cultural differences, and sensitivity to potential offenses relating to sexual and other boundaries between patient and practitioner.

AAC3200 Fundamentals of Chinese Medicine

3.00 credits (45 hours): 45 lecture hours

This course introduces the basic ideas that form the framework of Oriental medical thought, including the theories of Yin-Yang, the Five Phases, the vital bodily substances, and the functions of the Zang-Fu organs. In addition, students will receive a broad overview of pathology according to traditional Chinese medical theory and an introduction to the techniques of the Four Examinations, including the basics of pulse palpation and tongue examination.

3.00 credits (45 hours): 45 lecture hours

Prerequisites: AHB5034

Students explore the classic works of Chinese herbal medicine, such as the Shang Han Lun, Jin Gui Yao Lue, or Wen Bing Tiao Bian.

AHB5091 Herbal Clinical Medicine 1

3.00 credits (45 hours): 45 lecture hours

Prerequisite: AHB5034; AAC3213

This is the first course in a two-course sequence providing a foundation for the clinical practice of Chinese herbal medicine. Students learn the Chinese method of analyzing disease and determining treatment by the differential diagnosis of main presenting symptoms. Case studies are presented to reinforce lecture material.

AHB5092 Herbal Clinical Medicine 2

3.00 credits (45 hours): 45 lecture hours

Prerequisite: AHB5091

This is the second course in a two-course sequence providing a foundation for the clinical practice of Chinese herbal medicine.

AHB5031 Herbal Formulas and Strategies 1

3.00 credits (45 hours): 45 lecture hours

Prerequisite: AHB4022

This is the first course in a four-course sequence concerning the principles of classical herbal formulation and therapeutic functions. Major formulas currently used in Chinese medicine will be covered. Students will learn to analyze a formula according to the classical hierarchy of its ingredients (chief, deputy, assistant, messenger), and will learn to modify it to suit specific needs. Students will learn the therapeutic actions and clinical indications of each formula, including prohibitions and contraindications. Important research developments and modern formulations will be discussed. Students will learn to educate their patients regarding preparation, administration, storage and potential side effects of herbal formulas.

AHB5032 Herbal Formulas and Strategies 2

1.00 credit (15 hours): 15 lecture hours
Prerequisite: AHB5031

This is the second course in a four-course sequence concerning the principles of classical herbal formulation and therapeutic functions.

AHB5033 Herbal Formulas and Strategies 3

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AHB5032

This is the third course in a four-course sequence concerning the principles of classical herbal formulation and therapeutic functions.

AHB5034 Herbal Formulas and Strategies 4

3.00 credits (45 hours): 45 lecture hours
Prerequisite: AHB5033

This is the final course in a four-course sequence concerning the principles of classical herbal formulation and therapeutic functions.

AHB6050 Herbal Pharmacy Management

1.00 credit (15 hours): 15 lecture hours
Prerequisites: AHB5034

Students build on the skills they have developed throughout their herbal program, and learn the details of operating a working herbal pharmacy.

AHB6040 Herbal Review and Synthesis

4.00 credits (60 hours): 60 lecture hours
Prerequisites: AHB5092; AHB5034; AAC3213

This class is designed to consolidate the knowledge acquired in earlier herbal classes and to extend the students' mastery of Chinese herbal medicine to include the finer points of diagnosis, formulation, and modification. Students will learn to construct treatment plans for complicated, difficult, or unusual cases, while focusing on their individual learning needs.

ARS5060 Interactive Skills

1.00 credit (15 hours): 15 lecture hours

This experiential course emphasizes development of positive patient-practitioner interaction, listening and communication skills. Students learn to identify the "feeling" state of the client and reflect back the emotional content. These skills facilitate the "inquiring" aspect of the Four Examinations; they also have therapeutic value in helping the client develop and express self-perception.

AHB3010 Introduction to Chinese Herbal Medicine

1.00 credit (15 hours): 15 lecture hours

Students will be familiarized with the unique clinical and theoretical features that characterize the field of Chinese herbology. The theoretical paradigms and clinical demands of Chinese herbalists will be compared and contrasted with those of their acupuncturist counterparts. The specific strengths and weaknesses of the two modalities and their distinctive suitability for particular classes of illness will be established. The broad features of herbal pharmacognosy, including the pharmacological effects of the most basic categories of phytochemicals will be discussed. Students will become familiar with the various methods of delivering herbal materials, such as decoction, infusion, tincture, pill, powder, etc. Students will be introduced to the salient legal and economic elements of the herbal profession as practiced in the United States.

ACH3010 Introduction to the Chinese Language

1.00 credit (15 hours): 15 lecture hours

Students learn to use the dictionary, to count, to speak simple phrases, to recognize characters for numbers, and to recognize a basic Chinese medical vocabulary. The tones and pronunciation of spoken Chinese and the formation of written characters are introduced.

ARS5070 Introduction to Clinical Psychology

2.00 credits (30 hours): 30 lecture hours

In this course, students are introduced to selected theories and techniques of psychology, develop a working model of human behavior, explore assessment formats used by practitioners with patients who have mental health and substance abuse problems, and learn the essential skills to make and develop an effective professional relationship.



AHB4021 Materia Medica 1

4.00 credits (60 hours): 60 lecture hours
Prerequisite: AHB3010

This is the first course in a two-course sequence examining in depth the major herbs of the Chinese herbal pharmacopoeia. Studies include Chinese, Latin, and pharmacological naming systems, visual identification of raw substances, taste, Qi (the energetic "temperature" of an herb), actions, clinical indications, entering channels, dosage, contraindications and prohibitions, and preparation. Important developments in individual herb research will be covered as needed. Students will be introduced to the simplest level of herbal formulation, the combining of two or three herbs for synergistic effects and specific treatment strategies.

AHB4022 Materia Medica 2

5.00 credits (75 hours): 75 lecture hours
Prerequisite: AHB4021

This is the second course in a two-course sequence examining in depth the major herbs of the Chinese herbal pharmacopoeia.

AAC5290 Musculoskeletal Acupuncture

1.50 credits (45 hours): 45 laboratory hours
Prerequisites: AAC40244; AAC4244; AAC4250

Students learn to diagnose and treat musculoskeletal disorders (bi zheng), through synthesis of a variety of previously learned techniques and foundational concepts from Western medicine courses. Emphasis will be placed on understanding how acupuncture can be integrated with Western physical medicine. Common musculoskeletal disorders will be comparatively analyzed and treatment plans devised using both Chinese and Western approaches.

AAC4241 Needling Techniques 1

1.50 credits (45 hours): 45 laboratory hours
Prerequisite: AAC4024

This is the first course of a four-course laboratory sequence training students in the needling of major points of the body. Students will comprehensively address safety and Clean Needle Technique. Students will practice needle insertion on the most common treatment points, emphasizing refinement of point location and painless insertion.

AAC4242 Needling Techniques 2

0.50 credit (15 hours): 45 laboratory hours
Prerequisite: AAC4024; AAC4241

This is the second course of a four-course laboratory sequence training students in the needling of major points of the body. Students will practice needle insertion on the most common treatment points, emphasizing refinement of point location and painless insertion.

AAC4243 Needling Techniques 3

1.00 credit (30 hours): 30 laboratory hours
Prerequisite: AAC4024; AAC4241

This is the third course of a four-course laboratory sequence training students in the needling of major points of the body. Students will practice needle insertion on the most common treatment points, emphasizing refinement of point location and painless insertion.

AAC4244 Needling Techniques 4

1.50 credits (45 hours): 45 laboratory hours
Prerequisite: AAC4024; AAC4241

This is the final course of a four-course laboratory sequence training students in the needling of major points of the body. Students will practice needle insertion on the most common treatment points, emphasizing refinement of point location and painless insertion.

AWM5060 Nutrition

3.00 credits (45 hours): 45 lecture hours
Prerequisite: AWM4042

This course provides students with a foundational understanding of Western nutritional and dietary principles. Students are introduced to macro- and micro-nutrients, supplements, popular diets and their clinical applications. They also examine the principles for the promotion of health, wellness and longevity via diet.

AWM4031 Pathophysiology 1

2.00 credits (30 hours): 30 lecture hours

Prerequisite: AWM3012

This is the first course in a two-course sequence concerning disease processes of the body, from a systems-based biomedical perspective. Students will compare and contrast normative and pathological states, including indications and symptomology.

AWM4032 Pathophysiology 2

2.00 credits (30 hours): 30 lecture hours

Prerequisite: AWM4031

This is the second course in a two-course sequence concerning disease processes of the body, from a systems-based biomedical perspective.

AWM5080 Pharmacology

2.00 credits (30 hours): 30 lecture hours

Prerequisite: AWM4042

Students learn the rationale for pharmacological intervention for selected drugs; the use of drug information sources; proper interaction with the patient and prescriber; recognition of adverse drug reactions and drug abuse; and the basic principles of pharmacology and toxicology in humans.

AAC6160 Pharmacology and Oriental Medicine

1.00 credit (15 hours): 15 lecture hours

Prerequisite: AAC3213

Students learn the physiological effects of common drugs in terms of their potential impact on a traditional Chinese medical diagnosis. Methods of counteracting side effects will be examined.

ARS5090 Practice Management

2.00 credits (30 hours): 30 lecture hours

This course provides students with the necessary knowledge and skills to open and manage a practice. Topics include legal and ethical issues such as scope of practice, informed consent, recognition and clarification of patient expectations, confidentiality, record keeping, storage and release, patient referrals, legal requirements regarding general liability and

malpractice insurance, state and federal requirements for employees, and ethical and legal aspects of third party reimbursement. Students become familiar with the laws governing acupuncture in the State of Minnesota as well as general principles regarding laws in other states in which they may practice. The course covers essential business skills such as basic bookkeeping and billing, business office systems, office setup (costing and practical considerations), selection of professional liability insurance. Basic public relations, practice-building and marketing strategies are taught within the framework of ethical business practices. This course may be co-taught by a variety of lecturers, each of whom has experience in particular aspects of practice management.

AAC4030 Pre-Clinic Workshop

2.00 credits (60 hours): 60 laboratory hours

Prerequisites: AAC3213; AAC4024

This course enables students to make the transition from classroom to clinic. Students are oriented to clinical procedures and protocols and learn the clinical skills of accurate charting and record keeping. Students practice information gathering, diagnosis, and treatment on each other, through supervised simulation and role-playing. Students explore practical aspects of clinical work, such as treating patients with disabilities, treating during pregnancy, working with older patients, and dealing with unexpected situations. This course includes a module on clinical crisis management. Students may be videotaped in order to provide objective feedback on their developing clinical work.

ACH3030 Qi Cultivation (ELECTIVE)

1.00 credit (15 hours): 15 lecture hours (Repeatable)

This course presents the classical practice of Qi Gong in the context of health care. Students will learn basic movements and exercises directed toward awareness and development of Qi. The goal is to help the students achieve a state of equanimity and balance in their personal lives as well as their work with patients.

AHB5130 Traditional Oriental Food Therapy

2.00 credits (30 hours): 30 lecture hours

Prerequisite: AHB4021

The properties of specific foods are studied according to Oriental therapeutic principles. Different approaches to food therapy are examined. Methods of preparing foods and

their influence on therapeutic actions of foods are explored. Dietary recommendations are given for various patterns of disharmony. Students learn how to prepare a selection of therapeutic recipes.

AAC5060 Tui Na

1.00 credit (30 hours): 30 laboratory hours
Prerequisites: AAC3213; AAC4024

Students learn the principles and techniques of Chinese manual therapy via lecture, demonstration and hands-on practice. Focus is on techniques used in manipulating soft tissue areas of the neck, shoulder, and back.

AWM5071 Western Clinical Medicine 1

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AWM4042

This is the first course in a four-course sequence of major health conditions and their pathogenic mechanisms as defined by Western biomedicine, cross-referenced with the disease states recognized by Oriental medicine. Particular attention is paid to conditions with a high risk of significant adverse outcomes for which effective Western treatments are available, and to serious conditions requiring physician referral. Attention is also paid to conditions whose Western treatment is often unsatisfactory due to poor outcomes or adverse side-effects. Analysis of pertinent laboratory and other medical screening tests are reviewed and analyzed. This course is designed to complement Acupuncture Clinical Medicine 1-3 (AAC5151-5153), and, as far as possible, the traditional Chinese medical disease categories covered in that course are used as a framework for presenting the Western medical conditions covered in this course.

AWM5072 Western Clinical Medicine 2

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AWM4042

This is the second course in a four-course sequence major health conditions and their pathogenic mechanisms as defined by Western biomedicine, cross-referenced with the disease states recognized by Oriental medicine.

AWM5073 Western Clinical Medicine 3

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AWM4042

This is the third course in a four-course sequence major health conditions and their pathogenic mechanisms as defined by Western biomedicine, cross-referenced with the disease states recognized by Oriental medicine.

AWM5074 Western Clinical Medicine 4

1.00 credit (15 hours): 15 lecture hours
Prerequisite: AWM4042

This is the final course in a four-course sequence major health conditions and their pathogenic mechanisms as defined by Western biomedicine, cross-referenced with the disease states recognized by Oriental medicine.

AWM4041 Western Medical Screening 1

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AWM3012; Corequisite: AWM4032

This is the first course in a two-course sequence concerning Western medical techniques for physical examination, health screening and care management. Course topical areas include measurement of vital signs and the musculoskeletal examination, common laboratory tests and radiologic studies, charting and medical record keeping, and the referral process. Students will learn to recognize serious health conditions, which, under Minnesota acupuncture regulations, require referral for Western medical care. The intention of this course sequence is to better prepare students for interaction with the Western medical care system.

AWM4042 Western Medical Screening 2

2.00 credits (30 hours): 30 lecture hours
Prerequisite: AWM4031

This is the second course in a two-course sequence concerning Western medical techniques for physical examination, health screening and care management.

Northwestern features a unique science-based **massage therapy program** that can be completed in less than one year.





CUTTING-EDGE Practitioners:

The School of Massage Therapy

MISSION OF THE SCHOOL OF MASSAGE THERAPY

The mission of the School of Massage Therapy is to provide quality education and clinical development in the field of massage therapy.

EDUCATIONAL GOALS OF THE SCHOOL

Therapists who successfully complete the program of study offered by the School should:

- Effectively and accurately assess the condition of a client, and develop and implement a therapeutic plan relevant to the client's needs and preferences;
- Communicate effectively with clients and the general public;
- Be able to direct clients, when appropriate, to a spectrum of other resources;
- Be prepared to develop and sustain a successful massage therapy practice;
- Understand the psychological and professional boundary issues present in practice, and act based upon ethical standards of practice;
- Understand the importance of actively managing and maintaining one's own health and wellness, including the use of effective biomechanical practices; and
- Be prepared to pass the National Certification Examination for Therapeutic Massage and Bodywork and related state and local examinations.

MASSAGE THERAPY AS HEALTH CARE

The program of study offered by the School of Massage Therapy is based upon two assumptions about massage therapy. The first assumption is that massage therapy is a type of health care. While we are respectful of the diversity of approaches

to massage practice, the intention of the School of Massage Therapy is to prepare therapists to work with other natural and medical health care providers. While we offer thorough training in basic relaxation-oriented massage, we do so as preparation for more specific therapeutic work. Massage therapy practiced in health care environments tends to be more problem-based and more strongly focused on deep tissue work, or soft tissue rehabilitative techniques. The majority of our technique training focuses on this type of work. As a natural health science university, Northwestern believes that natural health care practitioners should be trained together and will in many instances practice together. The University and the School view massage therapy as an integral part of natural health care.

MASSAGE THERAPY AS A PROFESSION

The second assumption is that massage therapy is a profession, as opposed to simply a career or a trade. As professionals, massage therapists should be expected to conduct themselves in the same professional manner as doctors, nurses and other health care professionals in terms of their interactions with patients, clients, other providers and the general public. Professionals are generally held to higher and more specific ethical and behavioral expectations. Our Professional Studies course sequence provides specific preparation in the areas of communication skills, lifelong learning, ethical decision-making, legal and regulatory issues, and professional practice development.

APPROACH TO LEARNING

The School of Massage Therapy believes that the students, faculty and the program should be continuously learning. Students learn from faculty, from each other, from their clients, and from sources of professional information. Faculty continue to learn in order to remain current on relevant information. The program learns from the experiences of students and faculty, and evolves accordingly. As in most professional programs, students in the School frequently

learn by "doing." The School takes the holistic perspective of student as future practitioner rather than focusing solely on course-based demonstrations of performance, such as tests. As a result, students receive and respond to frequent objective and subjective performance feedback, from faculty, peers, and clients. This mirrors the experience of most therapists in practice, who must be dynamically responsive to client feedback in order to be clinically effective and professionally successful.

CLASS SIZE AND ATTENDANCE

The School believes that small class sizes are essential to effective learning of massage therapy techniques. Therefore, the School seeks to admit no more than 24 students in each entering class. Because the School teaches technique through reciprocal application, the learning of every student can be impacted by the attendance patterns of other students. Course attendance is a demonstration of seriousness about the program of study, a demonstration of respect for the faculty and your colleagues, and a necessity for course success.

COMING TO SCHOOL: THE MASSAGE THERAPY JOURNEY

Admission to the School

Northwestern admits as students women and men of good character and health who are qualified by previous education and experience to meet its academic challenges and to become a practicing massage therapist. New students are admitted at the beginning of each trimester of the academic year: September, January, and April. Applications for admission are available online on our web site at www.nwhealth.edu or they may be obtained by contacting the Office of Admissions. The application for admission must be accompanied by a non-refundable application processing fee of \$50 (U.S. dollars) and a criminal background check fee of \$20 (U.S. dollars). It is the responsibility of the applicant to read this catalog and comply with all provisions and instructions.

Entrance Requirements

Applicants must meet the following requirements:

- All students must be at least 18 years of age at the time of admission.
- Students must have an earned high school diploma, its foreign equivalent, or a General Equivalency Diploma. Successful completion of at least 60 semester credit hours

in a college or university accredited by a regional accrediting agency recognized by the United States Department of Education will be also accepted as evidence of ability to benefit. Students are strongly recommended to take at least one year each of high school biology, chemistry, and physics; and mathematics through algebra.

- Students must demonstrate sufficient maturity to undertake a health care profession, including the capacity to ethically and responsibly manage professional boundaries.

Admission to the School of Massage Therapy is competitive. The University expects that most, if not all, students will exceed the minimum admission requirements.

Qualifications

A student must possess the following abilities, with or without reasonable accommodation, for completion of the professional certificate program in massage therapy:

1. Ability to apply massage and adjunctive techniques over the full range of a client's body, including positioning patients, palpating, feeling with hands and fingers, pushing, pulling, kneading, grasping, twisting wrists, and lifting up to ten pounds, for periods of up to one hour without interruption;
2. Ability to determine depth and intensity of manual pressure and force, as applied in the performance of common massage and adjunctive procedures and techniques;
3. Ability to see and hear, with or without reasonable accommodation, sufficient that the student can receive and record client histories; document treatment plans; provide instructions to clients; and provide routine client safety services;
4. Ability to perform in all laboratory and clinical settings without posing a threat to herself/himself, to the safety and well-being of fellow students, or to clients;
5. Ability and willingness to receive massage and adjunctive treatment. *Much of the technical instruction in the programs requires reciprocal application of the techniques of massage therapy, including trigger point therapy and cross fiber friction. In reciprocal laboratory experiences, receiving techniques is necessary in order to learn proper procedures, and to receive and provide learning feedback; reciprocal application of technique is also useful for developing sensitivity to client needs. The School may temporarily excuse a student from receiving massage therapy provided that there is a specific medical contraindication, as determined in writing by a licensed health care professional.*

All students, with or without reasonable accommodation, must carry out laboratory and clinical assignments, including providing massage therapy services to clients. Qualified persons with disabilities, with or without reasonable accommodation, must be able to pass oral, written and practical examinations and meet all of the clinical requirements of the University.

It is in the best interests of both the student and the University to assess the degree of limitation caused by disability. However, the University will make the final determination of whether or not an individual meets all qualifications for study at the University.

Persons who have been convicted of any felony or misdemeanor of a violent or sexual nature may be prohibited from professional health care practice in many jurisdictions. Northwestern Health Sciences University can deny admission to applicants with such convictions. The University may conduct a criminal background check on applicants.

Materials Required for Admission

Materials required for admission include:

1. A properly completed application for admission. Please type or print neatly.
2. An application processing fee of \$50 (U.S. dollars). This fee is nonrefundable and must be submitted with the application for admission.
3. Official transcripts from all colleges attended sent directly to Northwestern from those colleges. High school transcripts or G.E.D. certificate are required only if the student has less than one year (36 semester credits) or do not have prior college work. (Note: Please indicate on your application if your transcripts will be arriving under another name.)
4. Three completed character reference forms. References should be people who have known you for a period of at least six months. References from professors and natural health care professionals are preferred. Relatives are not accepted as references. Northwestern will send character reference forms to those references listed on the application, who should complete the form and return it to the University.
5. A completed criminal background check. Northwestern will provide a consent form that must be completed and returned to the Office of Admissions. The consent form must be accompanied by a \$20 (U.S. dollars) criminal background check fee.
6. A completed essay (see Application Form for instructions).

Transfer Application

A student wishing to transfer from another massage therapy program must:

- Follow the same application procedures as a new student (see previous section in catalog).
- Submit an official transcript from the massage therapy program(s) previously attended.
- Submit two letters of recommendation from faculty members of the massage therapy program previously attended, as well as a letter from that program's registrar or academic officer indicating that the student applicant is leaving that program in good standing and could continue studies in their present massage therapy program.
- The applicant's academic record must further allow for the student to be admitted without probation or other restriction, as defined by Northwestern policies.
- A transfer student must complete at least two trimesters of resident study in the Northwestern program prior to graduation.
- Excessive indebtedness as a result of financial aid borrowing will be a factor in the Admissions Committee's decisions regarding acceptance of a transfer student. The Student Records and Financial Services Office will set upper limits of previous indebtedness.

Coursework submitted for transfer must meet the following requirements:

- Any coursework submitted for transfer must have been completed within five years of the date that a transfer application is submitted to the University.
- Any course submitted for transfer must meet or exceed the requirements for a comparable course at the School of Massage Therapy.
- Students must earn a grade of "C" or 75% of possible points in any course submitted for transfer. Courses submitted for transfer from programs within regionally accredited institutions will be accepted for transfer credit. Courses submitted from other programs may be accepted for advanced standing. Transfer credit or advanced standing may require successful completion of a competency examination, at the discretion of the Dean of the School. Competency examinations require time for appropriate

planning, administration and evaluation. Therefore, the School will not accept requests for advanced standing or evaluation of transfer credit that is received within two months of a student's planned start date.

- Transfer credit will only be awarded on a course-by-course basis. Requests for transfer credit or advanced standing must be made prior to matriculation into the School of Massage Therapy. Requests for advanced standing made following matriculation will not be accepted. These policies are subject to updating and modification. Contact the Office of Admissions for current information.

Responsibility of Applicant

It is the responsibility of the applicant to be aware of the entrance requirements and to ensure that they are met prior to enrollment. If the College determines at any time that requirements are not met in full, the student will not be allowed to enroll or to continue at Northwestern.

Minnesota Immunization Requirement

All students born in 1957 or later must comply with the Minnesota State College Immunization Law (Minn. Statute 135A.14). You must show DPT immunization within the last 10 years; and measles, mumps, and rubella immunization after your first birthday. However, exemptions are permitted for philosophical or medical reasons. Further information is included with letters of acceptance to Northwestern.

Some clinical environments outside the University Clinic system may establish immunization and/or health screening requirements exceeding the Minnesota State College Immunization Law. In addition, some clinical environments outside the University Clinic system may not accept placement of interns who have not received or are not in the process of receiving certain immunizations and/or health screenings.

Selection of Candidates

The Admissions Committee in general seeks to matriculate students who best suit the philosophies and goals of the University. Northwestern attempts to select students who have strong academic records and who demonstrate the motivational and personal characteristics suitable for a career in massage therapy. Service and a caring attitude are important characteristics of a future Massage Therapist. The University employs a rolling admissions process; therefore, early application could increase the applicant's probability for acceptance. Students are highly recommended to apply for the School

of Massage Therapy at least two months before the first day of their first academic term. Transfer credit or advanced standing requests must be made at least two months before the first day of the first academic term of attendance. The University encourages campus visits for all applicants and reserves the right to require an interview.

Payment

All tuition, fees and other amounts owed are due and payable by the end of the third week of class each academic term. After the completion of the third week of class, if tuition has not been paid or if arrangements for payment have not been made with the Student Records and Financial Services Office, a \$100 late fee will be assessed and registration for that academic term will be cancelled. In order to be reinstated, the affected student must pay tuition in full or make payment arrangements with the Student Records and Financial Services Office. All tuition, fees, and other amounts owed by a student must be paid in full before registration begins for the subsequent academic term, or s/he will not be allowed to register. Any student with a balance due at the time of graduation will not receive a diploma, and copies of official transcripts will be withheld until the balance is paid in full.

Tuition Deposit Policy

Applicants will be notified in writing of the Admission Committee's decision regarding their application following receipt of all application materials and committee review. Upon notification of acceptance, a candidate must remit a tuition deposit of \$100 (U.S. dollars) to reserve a position in the entering class. This tuition deposit is non-refundable but is applied toward the first trimester tuition. First trimester students who have been accepted and paid their \$100 (U.S. dollars) tuition deposit must pay the balance of their first trimester tuition on the first day of class. If the student has a loan in progress for the first trimester at Northwestern, then the first trimester tuition will be credited against this loan. It is important to note that because of the limited space available in each class, scheduling priorities, and the cost of education, the institutional refund policy does not apply to the \$100 tuition deposit.

International Applicants

Northwestern Health Sciences University welcomes the diversity that international learners bring to the University community. The University is a non-residential campus. Therefore, no housing is available to learners, foreign or otherwise. Individuals in F-1 student status are not eligible to seek employment off campus. All classes at Northwestern are taught in English. A learner may verify competency in English as follows:

1. Learners from non-U.S. English-speaking countries (excluding the Canadian province of Quebec) may include with their application a copy of their birth certificate. Or, these applicants may complete an English competency verification form, which can be obtained from the Office of Admissions.

2. All other foreign applicants (including those from the Canadian province of Quebec) must complete a T.O.E.F.L. (Test Of English as a Foreign Language) examination. Applicants completing the paper-based examination must earn a score of 540 or higher. Applicants completing the computer-based examination must earn a score of 207 or higher. Results of the T.O.E.F.L. must be sent directly to Northwestern from the testing agency. T.O.E.F.L. information can be obtained online at www.toefl.org or from: T.O.E.F.L., P.O. Box 6151, Princeton, NJ 08541-6151, U.S.A.

Students must provide evidence of having financial resources to complete a minimum of one year of education. An official bank statement indicating sufficient funds is required.

International transcripts must be evaluated by an international transcript evaluation service, such as World Education Services, Inc., (P.O. Box 745, Old Chelsea Station, New York, NY 10013) with official copies of the course-by-course evaluation being forwarded directly to both Northwestern and the student. Contact the Office of Admissions for a WES application form or names of other accepted transcript evaluation services.

Readmission to the School of Massage Therapy

A learner who is placed on administrative withdrawal may petition in writing for readmission to the School of Massage Therapy. A student who has been dismissed from the Program for academic reasons may petition in writing, once, for readmission to the School of Massage Therapy. Petitions for readmission must be submitted to the Dean. The following procedure applies:

1. A committee composed of faculty convenes to review the learner's written request.
2. The committee, chaired by the Dean, either:
 - requests additional information; or
 - writes a report recommending or not recommending readmission based on review of the request.
3. A recommendation for reinstatement shall include:
 - specific provisions for readmission (e.g., retaking a course or courses);
 - a date for readmission (e.g., immediately or the following academic term).
4. The Dean makes the final decision regarding readmission and communicates the decision in writing to the learner. The decision of the Dean may be appealed to the Vice President, Academic Affairs, or to the President.
5. The learner's adviser monitors the progress of any readmitted learner and reports to the Dean if the learner has or has not satisfied the stipulated provisions (if any) for readmission.
6. The Dean communicates in writing to the learner that all provisions (if any) for readmission have been met, or that provisions have not been satisfied and the learner is dismissed.

Academic Policies

The Dean, College of Arts and Sciences has ultimate responsibility for all educational matters related to study in the School of Massage Therapy at Northwestern. The Dean, through or in cooperation with the Associate Dean(s) and faculty, has the responsibility for administering these policies and for recommending exceptions.

The following academic policies and procedures refer specifically to the School of Massage Therapy. The University Student Handbook contains general policies and procedures that apply to all students of the University. The University and the College of Arts and Sciences retain the right to change any policies or establish additional policies at any time with administrative approval and written notification to learners and faculty.

Academic Policy Credits

The academic calendar includes Fall, Winter, and Summer academic terms of 15 weeks each. In general, one credit in the School of Massage Therapy represents 15 lecture hours, 30 laboratory hours or 45 clinical hours during a 15-week term.

Advanced Standing

Students may seek advanced standing for courses completed at another institution that satisfy the requirements of the School of Massage Therapy. The following requirements apply:

1. Any course submitted for advanced standing must have been completed within five years of the date that a request for advanced standing is submitted to the University.
2. Any course submitted for advanced standing must meet or exceed the requirements for a comparable course in the School of Massage Therapy.
3. Students must earn at least a "C" or 75 percent of possible points in any course submitted for advanced standing.
4. Advanced standing will only be awarded on a course-by-course basis.
5. Requests for advanced standing must be made prior to matriculation into the School of Massage Therapy. Requests for advanced standing made following matriculation will not be accepted.
6. Students must submit a transcript, notarized statement of grades from the awarding institution, or other official evidence that a course submitted for advanced standing was successfully completed.

The School of Massage Therapy reserves the right to require a challenge examination prior to the awarding of advanced standing, in any instance where satisfaction of the above requirements is in question. The examination may be oral, written, and/or clinical in nature.

Advanced standing hours will be indicated on student transcripts, along with the name of the originating institution. Final advanced standing approval will be granted by the Dean, or by the Associate Dean(s) as delegated.

Advanced standing may not substitute for more than nine semester credit hours of the School of Massage Therapy.

Fees for filing and review of a Request for Advanced Standing, advanced standing award, and challenge examinations will be established annually, and made available through the Student Records and Financial Services Office.

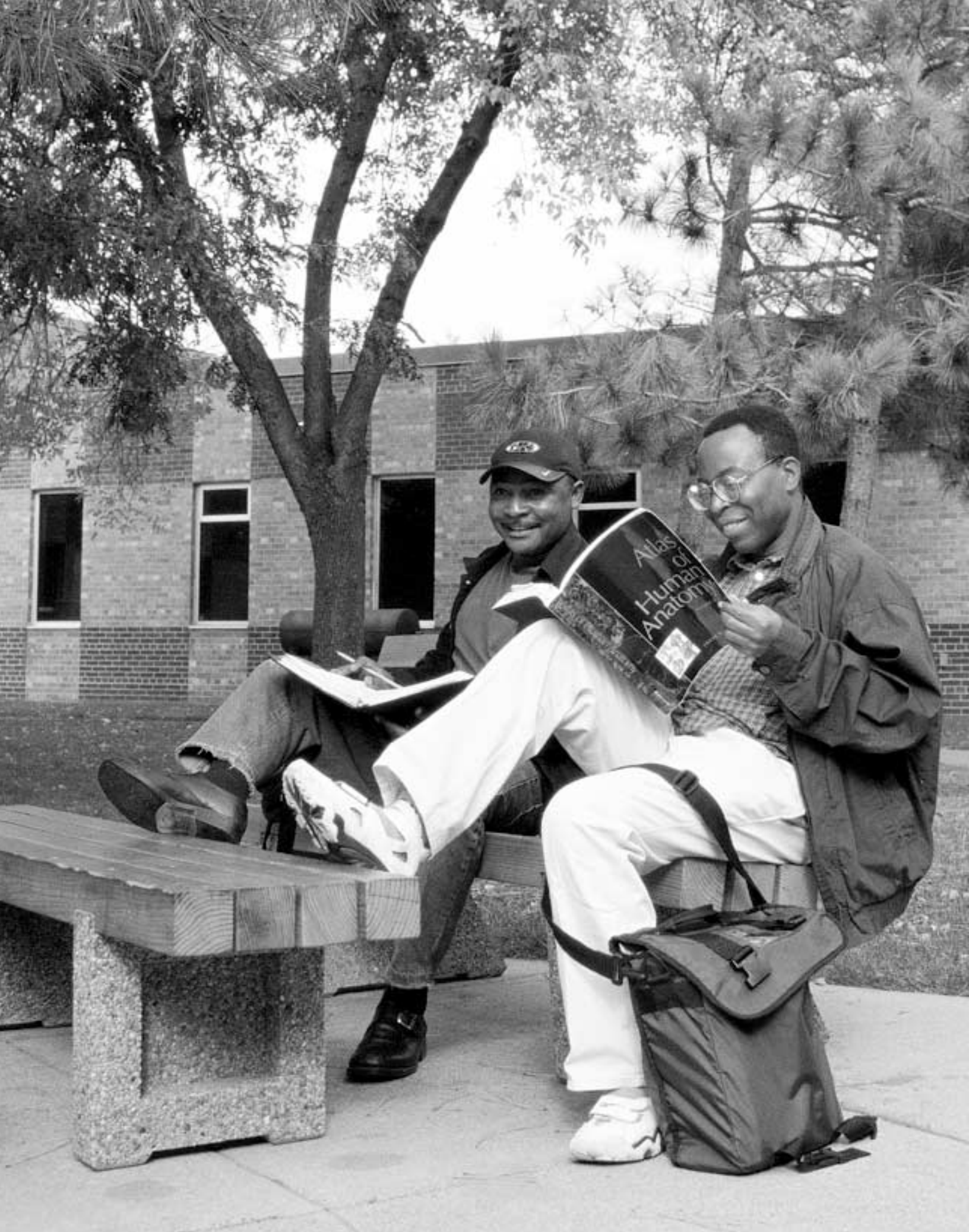
Grading Policy

The School of Massage Therapy uses a grade point system to evaluate the overall quality of course work. Clinical science and professional development courses are graded A, B, C, or F. Basic Sciences courses may be graded A, B, C, D, or F, at the discretion of the faculty member. Clinical experiences are graded S or U. The number of grade points earned in a given course is the number of credits for that course multiplied by the grade point corresponding to the grade recorded in that course, as indicated below:

Grade	Grade Points	Suggested Achievement Level
A	4	90 - 100 percent of points; <i>outstanding</i>
B	3	80 - 89 percent of points; <i>superior</i>
C	2	70 - 79 percent of points; <i>satisfactory</i>
D	1	60 – 69 percent of points; <i>minimally satisfactory; this grade may be awarded by Basic Sciences faculty only</i>
F	0	69 percent of points or fewer; <i>unsatisfactory (may be 59 percent of points or fewer in some Basic Sciences courses)</i>
S	N/A	<i>Satisfactory (C or above, competency successfully demonstrated)</i>
U	N/A	<i>Unsatisfactory (D / F; competency not successfully demonstrated)</i>
I	N/A	<i>Incomplete</i>
W	N/A	<i>Withdrawal</i>
T	N/A	<i>Transfer; used to indicate courses for which the learner received advanced standing or transfer credit</i>

Notes on Grading:

1. Instructors assign letter grades as appropriate according to the learner's achievement level.
2. Learners enrolled in the School of Massage Therapy must maintain a 2.0 ("C") grade point average unless otherwise stipulated. Learners may receive grades lower than C and remain in good standing if they maintain a 2.0 grade point overall. However, learners must satisfactorily complete all courses in order to graduate from the School of Massage Therapy.



3. Pluses and minuses are not part of the official grading system and are not figured into a learner's grade point average.

4. The Satisfactory/Unsatisfactory grade option is intended for clinical experiences and other work where a letter grade cannot be appropriately assigned. Use of S/U, however, is ultimately at the discretion of the faculty. Credits under this option are counted toward the total number of credits required for graduation, but are not used in determining a learner's grade point average.

5. A learner must earn a grade of A, B, C, or P in order to fulfill a clinical sciences, clinical experience or professional studies course prerequisite.

Use of the Grade "I"

The grade of "I" (incomplete) indicates that work was not completed prior to the last day of the term or learning contract, and is intended to reflect circumstances beyond the learner's or instructor's control. It is the responsibility of the learner to consult the instructor to ascertain what work remains to be completed. Incomplete work must be satisfactorily completed during the first four weeks of the next academic term in residence, or within 60 days of the conclusion of the learning contract. After that time, a grade of "I" will automatically become a grade of "F". Learners experiencing extenuating circumstances may seek a waiver of the time limit from the program administrator, who may choose to grant the waiver, refuse the waiver, or refer the request to the Academic Standards Committee. The University reserves the right to require the learner to provide evidence of extenuating circumstances to the satisfaction of the University. Under no circumstances will a waiver be awarded that extends beyond the conclusion of the learner's next academic term in residence following the awarding of the grade of "I".

Academic Honors

Students receiving and/or maintaining a G.P.A. of 3.50 or above are placed on the Director's List for academic honors. Academic honors at graduation are determined according to the following grade point levels:

Honor	G.P.A. Range
Cum laude	3.50 - 3.69
Magna cum laude	3.70 - 3.89
Summa cum laude	3.90 - 4.00

Graduation Requirements

The professional certificate in massage therapy is granted to those candidates who have:

1. completed the required course of study, of which the last two terms have been in residence at Northwestern Health Sciences University;
2. demonstrated competency in clinic and completed internship and field experience requirements;
3. earned at least a 2.0 cumulative G.P.A.;
4. fulfilled all financial obligations to the University; and
5. been recommended for graduation by the faculty.

For information on current fees, contact Student Records and Financial Services at 952-888-4777. Northwestern reserves the right to add additional requirements as it deems necessary.

Professional Licensure, Registration or Certification

Statewide standards for massage therapy practice have been established in 30 states and the District of Columbia as of early 2002. Each state has established slightly differing standards for professional eligibility. At this time, no statewide standard for professional licensure, registration or certification exists for massage therapists in Minnesota. Many cities in Minnesota have established ordinances that regulate the practice of massage therapy, and some cities require practitioner registration.

The University makes no guarantees that an individual student will satisfy the licensure, registration or certification requirements of any particular state or other jurisdiction. It is the responsibility of an individual student to confirm the regulatory requirements that may apply in any jurisdiction in which that student intends to practice.

Students who complete the program of study offered by the School of Massage Therapy will be eligible to sit for the National Certification Examination in Therapeutic Massage and Bodywork. In many states with statewide standards, successful completion of this examination is a qualifying requirement for licensure, registration or certification. The University requires that all its faculty in massage therapy successfully complete this certifying examination and continuously maintain certification.

SCHOOL OF MASSAGE THERAPY*2002-2004 CURRICULUM OVERVIEW**Trimester 1*

Course Number	Title	Credits	Total	Lect.	<i>Hours</i>	
					Lab	Clinic
SBS1211	Human Anatomy and Physiology 1	4.50	75	60	15	0
SBS1500	Medical Terminology	1.00	15	15	0	0
SMT1511	Massage Therapy Principles and Practice 1	4.50	120	15	105	0
SMT1151	Professional Studies 1	2.00	30	30	0	0
TRIMESTER 1 TOTAL		12.00	240	120	120	0

Trimester 2

Course Number	Title	Credits	Total	Lect.	<i>Hours</i>	
					Lab	Clinic
SMT1210	Applied Anatomy	2.00	45	15	30	0
SBS1212	Human Anatomy and Physiology 2	2.50	45	30	15	0
SMT1931	Massage Therapy Clinical Rotation 1	2.00	64	10	0	54
SMT2512	Massage Therapy Principles and Practice 2	3.50	90	15	75	0
SMT1152	Professional Studies 2	2.00	30	30	0	0
TRIMESTER 2 TOTAL		12.00	274	100	120	54

Trimester 3

Course Number	Title	Credits	Total	Lect.	<i>Hours</i>	
					Lab	Clinic
SNU1110	Human Nutrition	1.00	15	15	0	0
SMT2932	Massage Therapy Clinical Rotation 2	2.00	64	10	0	54
SMT2513	Massage Therapy Principles and Practice 3	3.50	90	15	75	0
SMT2153	Professional Studies 3	2.00	30	30	0	0
SMT2610	Special Topics in Massage Therapy	3.50	67	37	30	0
TRIMESTER 3 TOTAL		12.00	266	107	105	54
CURRICULUM TOTAL		36.00	780	327	345	108

COURSE DESCRIPTIONS

SMT1210 Applied Anatomy

2.0 credits (64 hours): 15 lecture hours,
30 hours laboratory

Students will enhance their knowledge of the major muscles of the body, their origins, insertions, tendons of attachment, and actions, as well as associated bones, bony landmarks and stabilizing ligaments for each joint and major structure. Students will learn about planes of movement, level classification and action in the body, and relationship of levers to planes of movement. The laboratory portion of this course utilizes the Maniken Professional system (anatomy-in-clay).

SBS1211 Human Anatomy and Physiology 1

4.5 credits (75 hours): 60 lecture hours,
15 hours laboratory

This is the first course of a two-course sequence in systems-based normal and abnormal human anatomy and physiology. Students will learn the design and function of the systems of the human body, with emphasis on the skeletal, muscular, nervous and integumentary systems. The laboratory includes observation of prosected human cadavers.

SBS1212 Human Anatomy and Physiology 2

2.5 credits (45 hours): 30 lecture hours,
15 hours laboratory

This is the second course of a two-course sequence in systems based normal and abnormal human anatomy and physiology. Students will learn the design and function of the systems of the human body, with emphasis on the cardiovascular, endocrine, respiratory, digestive, urinary and reproductive systems and the sensory organs. The laboratory includes observation of prosected human cadavers.

SNU1110 Human Nutrition

1.0 credit (15 hours): 15 lecture hours

Students learn the fundamental principles of human nutrition. The course emphasizes the importance of proper nutrition as a component of self-care for therapists.

SMT1921 Massage Therapy Clinical Rotation 1

2.0 credits (64 hours): 10 lecture hours,
54 hours clinic

Students provide a minimum of 28 massage therapy treatment sessions in the School of Massage Therapy Teaching Clinic, under the supervision of School faculty. Students must successfully complete an individualized learning plan established between each student and their clinical supervisor. Learning plans in Clinical Rotation 1 focus on the application of full body massage techniques, as presented in *Massage Therapy Principles and Practice 1*. Students participate in case conferences and/or seminars on professional issues, write clinical journals, and complete other projects as assigned.

SMT2922 Massage Therapy Clinical Rotation 2

2.0 credits (64 hours): 10 lecture hours,
54 hours clinic

Students provide a minimum of 28 massage therapy treatment sessions in the School of Massage Therapy Teaching Clinic, under the supervision of School faculty. Students must successfully complete an individualized learning plan established between each student and their clinical supervisor. Learning plans in Clinical Rotation 2 focus on the application of advanced techniques, including trigger point therapy and cross fiber friction. Students participate in case conferences and/or seminars on professional issues, write clinical journals, and complete other projects as assigned.

SMT2930 Massage Therapy Specialized Clinical Rotation (ELECTIVE)

1.0 credit (32 hours): 5 lecture hours, 27 hours clinic
SMT2930 may be repeated once

Students provide a minimum of 15 massage therapy treatment sessions in a specialized clinical environment, under the supervision of School faculty. Students must successfully complete an individualized learning plan established between each student and their clinical supervisor. Learning plans in the Specialized Rotation are based on the needs of the specialized environment. Specialized rotations may take place in hospitals, hospices, long-term care centers, rehabilitation centers, community health centers, or other health care environments. Students may be required to meet requirements established by the School's clinical partners.

SMT1511 Massage Therapy Principles and Practice 1

4.5 credits (120 hours): 15 lecture hours,
105 hours laboratory

Students learn techniques for full body massage, including palpatory skills. Students are introduced to correct body mechanics, injury prevention, table management, draping methods, and introductory charting and SOAP notation. The course includes massage therapy theory and history, and an introduction to the methods and principles of reflexology. In addition to laboratory sessions, learners are required to engage in practice massage sessions outside of scheduled class hours.

SMT2512 Massage Therapy Principles and Practice 2

3.5 credits (90 hours): 15 lecture hours,
75 hours laboratory

Students learn the principles and methods of trigger point therapy and cross fiber friction, as applied to the upper body, including assessment, treatment and common symptomologies. In addition to laboratory sessions, learners are required to engage in practice massage sessions outside of scheduled class hours.

SMT2513 Massage Therapy Principles and Practice 3

3.5 credits (90 hours): 15 lecture hours,
75 hours laboratory

Students learn the principles and methods of trigger point therapy and cross fiber friction, as applied to the lower body, including assessment, treatment and common symptomologies. In addition to laboratory sessions, learners are required to engage in practice massage sessions outside of scheduled class hours.

SBS1500 Medical Terminology

1.0 credit (15 hours): 15 lecture hours

Students will learn general medical terminology, including basic Latin and Greek roots, prefixes and suffixes.

SMT1151 Professional Studies 1

2.0 credits (30 hours): 30 lecture hours

Students review postsecondary-level study skills, learn how to access and generally appraise clinical research and information, and learn how to utilize the University E-mail and information system. Students learn effective and appropriate communication techniques for management of the client-therapist relationship, and communication skills necessary for working with colleagues in the health care community.

SMT1152 Professional Studies 2

2.0 credits (30 hours): 30 lecture hours

Students learn the principles of professional ethics and professionalism, focusing on the development and application of appropriate professional boundaries and the psychological dimensions of the client-therapist relationship. Students learn legal, regulatory and professional considerations for massage therapists.

SMT2153 Professional Studies 3

2.0 credits (30 hours): 30 lecture hours

Students engage in goal-setting for practice, and develop a business plan. Students learn a variety of methods for managing and promoting a successful practice, and examine the strengths and liabilities of several employment settings and structures.

SMT2610 Special Topics in Massage Therapy

3.5 credits (67 hours): 37 lecture hours,
30 hours laboratory

Students learn additional massage therapy techniques and applications, including abdominal and sports massage. Students learn about the unique considerations for treating special populations, including older adults, persons with disabilities, and persons with terminal illnesses. Students are introduced to treatment issues for other populations, including women in pregnancy. Other topics may be included.

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The material contained in this catalog is for informational purposes only. Northwestern Health Sciences University has the right to add to, change, or deviate from this catalog at any time, with or without notice.

This catalog does not constitute, nor is it intended to constitute, a contract with any student.

This catalog replaces and supercedes all prior catalogs.



NONDISCRIMINATION POLICY

It is the policy of the Board of Trustees that Northwestern Health Sciences does not unlawfully discriminate on the basis of race, color, religion, national or ethnic origin, age, gender, marital status, sexual orientation, disability, veteran status, or status with regard to public assistance in administration of and access to the University's educational, research, and clinical programs, student organizations and events, employment, and other University-administered activities.

Further, it is the policy of the Board of Trustees of Northwestern Health Sciences University to maintain the University community as a place of work and study for staff, faculty, students, and patients free of racial or sexual harassment.

Inquiries regarding compliance and grievance procedures can be directed to: Deborah Hogenson, Human Resources Director, Northwestern Health Sciences University.

STUDENT RIGHT TO KNOW

In accordance with the Student Right to Know Act (Title I of Public Law 101-542), graduation rates for degree-seeking students are available to all current or prospective students from the Office of Admissions and will be provided upon request.

In accordance with the Student Right to Know Act (Title II of Public Law 101-542), students may receive, on request, information about campus security including campus crime statistics from the Office of Admissions.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (F.E.R.P.A.) AND STUDENT RECORDS

The Family Educational Rights and Privacy Act (F.E.R.P.A.) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the Student's education records within 45 days of the day that the University receives a request for access.

Students should submit to the Registrar, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The Registrar, or other appropriate official, will make arrangements for access and notify the Student of the time and place where the records may be inspected. If the records are not maintained by the University official to

whom the request was submitted, that official shall advise the Student of the correct official to whom the request should be addressed.

2. The rights to request an amendment of the Student's education records that the Student believes are inaccurate or misleading.

Students may ask the University to amend a record they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

If the University decides not to amend the record as requested by the Student, the University will notify the Student of the decision and advise the Student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the Student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the Student's education records, except to the extent that F.E.R.P.A. authorizes disclosure without consent.

One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in any administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, collection agent, or community-based mentor); a person serving on the Board of Trustees; or a Student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Upon request, the University discloses education records without consent to officials of another school in which a Student seeks or intends to enroll. The University shall make reasonable efforts to notify a Student of such a record request.

4. The right to file a complaint with the United States Department of Education concerning alleged failures by the University to comply with the requirements of F.E.R.P.A. The name and address of the Office that administers F.E.R.P.A. is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, DC 20202-4605

The following information is public information, unless the Student has requested non-disclosure:

- > Name
- > Address
- > E-Mail Address
- > Telephone Number
- > Dates of Enrollment
- > Enrollment Status (f/t, p/t, not enrolled)
- > Major/Course of Study
- > Name of Adviser/Program Director
- > Class/Term
- > Academic Awards and Honors
- > Degree(s) Received
- > Photograph

Students have the option to suppress directory information:

- > Suppression of all directory information: If this option is selected, no information pertaining to attendance will be released, and the Student's name and other information will not appear in University directories. Students who receive financial aid provide consent for release of certain directory and other information to lenders and/or guarantors as a consequence of their financial aid contract(s).

Students must express, in writing, their wish to suppress directory information to the Office of the Registrar, or other appropriate official.

Under the Act, the University reserves the right to disclose educational records or components thereof, to parents of dependent Students as defined according to the Internal Revenue Code of 1954, Section 152 (as amended). All Students will be assumed to be independent unless a parent presents a certified copy of their most recent Federal Income Tax Form establishing the Student's dependent status.

No official transcript will be released if the Student or graduate is delinquent or in default either to the University or to any student loan-servicing agency handling any student loans

undertaken while enrolled. Requests must be submitted one week prior to the date transcripts are needed. Official transcripts must be mailed directly to the designated recipient. They cannot be released to the Student.

A Student File is also kept on each Student from the time of application. These files are also confidential and are available for administration, faculty, and the individual Student. Students may examine their individual file at any time, but it may not be removed from the Registrar's office.