



UNIVERSITY of WESTERN STATES  
*Integrating Health and Science*

# UNIVERSITY CATALOG 2015-2016



2900 NE 132ND AVENUE, PORTLAND, OREGON 97230  
[WWW.UWS.EDU](http://WWW.UWS.EDU)

## Catalog Provisions

The UWS Catalog is provided in order to serve prospective students, students, faculty, and staff members as a reference explaining institutional mission, curricula, and a number of the university's policies and procedures that pertain particularly to students. This catalog is subject to change as new and more efficient policies, procedures, and/or curriculum revisions are adopted. It does not serve as a contract, but as a source of information to interested parties and students. If, at any time the policies conflict with the information in this catalog, the policies will govern. All changes apply both to prospective students and to those who have already enrolled, unless specifically exempted. Suggestions are welcome and may be submitted in writing to the office of office of admissions.

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If you have any questions, please contact:

Timothy Foley, EdD  
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Health Center - East Portland	503-808-7979	
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# Message from the President



Welcome to the University of Western States. For over a century, the institution has been a leader in the development of conservative health care education and practices. UWS is committed to providing a diversified education for students while serving the community as an integrated health care resource.

Western States offers a doctor of chiropractic degree along with a number of health-related bachelor's and master's degrees. We also offer an accredited certificate program in therapeutic massage, and extensive continuing education courses for practicing professionals. Our evidence-informed curricula are solid and progressive, incorporating current health studies with the art of clinical care. "For the Good of the Patient" is the UWS motto that embodies who we are and what we do. UWS students consistently demonstrate academic distinction, exemplary service to their professions, and provide the highest quality of health care.

The future of health care will focus on integrating disciplines, preparing competent professionals, providing effective care, and promoting health and wellness. UWS graduates exemplify the competencies and attributes necessary to meet our individual and collective responsibilities to society.

I know that in electing to share the UWS vision you have made the best choice available in integrative health care education. I wish you the best as you pursue your dreams and achieve your personal goals.

A handwritten signature in black ink that reads "Joseph Brimhall". The signature is fluid and cursive, with a large, stylized initial "J".

Joseph Brimhall, DC, FICC  
President

## UWS Mission, Vision, and Goals

### Mission

The mission of the University of Western States is to improve the health of society and advance the science and art of integrated health care through leadership and excellence in health sciences education, service, and the enhancement of knowledge through research and scholarship.

### Vision

UWS is committed to improving the quality of human life. We will be a leader in education and health care, renowned for our programs, facilities, and people. We will achieve excellence through transformative practices in teaching and learning, scholarship, wellness promotion, and by fostering professional and community relationships.

### Core Themes - Essential Mission Elements

Health Sciences Education  
Service and Patient Care  
Research and Scholarship

### Institutional Goals

- A. To be a vital institution of higher learning distinguished as a caring, rewarding, and enjoyable place to learn, work, grow, and engage.
- B. To develop a health services model that excels in the development and delivery of integrated care and training.
- C. To be an exemplar in teaching, learning, evaluation, and scholarship.
- D. To ensure institutional stability, sustainability, and significance.

### UWS Logo



The circle medallion represents a complete and well-rounded curriculum to equip graduates with the tools they need to succeed. The graphic symbols within the medallion represent the letters "UWS." The design is intended to communicate the institution serves as the vessel for the knowledge it provides. The color selection was made to honor the long history and tradition of the University of Western States, as well as to convey the richness of experience and acknowledgement of the value that the university brings to the lives of all those participating therein.

## Values

Core Values - <i>the heart of the institution's identity</i>	Aspirational Values - <i>desired qualities to distinguish and advance the institution</i>
<p><b>Legacy</b> The University of Western States distinguishes itself as the nation's second oldest doctor of chiropractic program, with deep roots in integrating health and science. With a focus on patient-centered health care, the university honors the profession's historical foundation and traditions to inspire an enduring spirit of curiosity, imagination, and discovery.</p> <p><b>Critical Inquiry</b> Critical Inquiry is the intentional application of reflective thinking and reason in the evaluation of ideas and information to guide beliefs and actions. Critical inquiry is vital for faculty and students and is pivotal to research and scholarly activities that lead to best practices in patient care and health sciences education. To advance the best interests of patients and students, the university strives to:</p> <ul style="list-style-type: none"> <li>• Study and distinguish what works and what does not.</li> <li>• Formulate and evaluate innovative practices that support learning, wellness, and optimum health.</li> <li>• Assess the efficacy of methods and modalities employed in the delivery of education and patient care for the purpose of continuous improvement.</li> </ul>	<p><b>Excellence</b> The University of Western States is committed to highly effective teaching and training to promote transformational student learning and understanding. The university will be known for excellence in:</p> <ul style="list-style-type: none"> <li>• Integrative, primary whole-person care instruction and delivery</li> <li>• Advanced practice specialties</li> <li>• Comprehensive wellness programs and research</li> </ul> <p><b>Collaboration</b> Partnership and collaboration with other institutions, organizations, professionals, and the community are necessary for the growth and significance of the university. The quality of health care is enhanced when diverse health care professions join forces to provide a blend of services and practices that are essential to improving the health of individual patients and society.</p> <p><b>Service</b> The university aspires to enrich its level of professionalism to inspire optimal performance, collaboration, loyalty, student and employee retention, and competitive advantage. Employees are challenged to:</p>
<p><b>Traditional Values - <i>established behavioral standards</i></b></p> <ul style="list-style-type: none"> <li>• Respect for others</li> <li>• Integrity and ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Provide "above and beyond" assistance, care, and expertise</li> <li>• Address challenges and solve problems</li> <li>• Invigorate relationships</li> <li>• Help sustain the university and the community at large</li> </ul>

## For the Good of the Patient™

"For the Good of the Patient" is the University of Western States motto. It captures the intent behind much of what happens at the university. UWS exists to improve the health of society through its educational programs, research, and clinical services. At the core of university decision-making is the greater professional responsibility to the patients (also referred to as clients or health care consumers) who ultimately benefit from the fulfillment of the university mission. This responsibility drives UWS programs, employees, students, and graduates.

# University Overview

## Organization

The University of Western States is organized into three academic colleges and a research division:

The **College of Chiropractic** offers the first professional doctor of chiropractic (DC) degree program, the institution's oldest degree program. Prior to 2010, when the institution was reorganized into a university, the college was known as the Western States Chiropractic College.

The **College of Graduate and Professional Studies** offers master's degrees and residencies/fellowships in the health sciences. The college offers an MS in exercise and sports science with a fellowship in sports science, an MS in human nutrition and functional medicine, an MS in diagnostic imaging with a residency program. Additional master's programs are under development.

The **College of Undergraduate Studies** offers a BS in human biology completion degree and a certificate program in massage therapy. Additional bachelor's degree programs are under consideration.

The **Division of Research** includes the Center for Outcomes Studies, which conducts high-quality studies, primarily randomized controlled trials. UWS is actively involved in collaborative relationships and cooperative research projects with other health professions, academic institutions, and health care organizations.

## Governance

The University of Western States is incorporated as a private, nonprofit institution of higher learning in the state of Oregon with academic programs leading to undergraduate, graduate, and professional degrees. Control of the university is vested in the Board of Trustees. Members of the board are selected on their ability, experience, integrity, and interest in the development and growth of the university. The board appoints the university president, who serves as the chief executive officer of the institution. University administrators are responsible for the leadership and management of the day-to-day operations ensuring appropriate planning and allocation of resources to accomplish the mission of the university.

## History of Western States

D.D. Palmer founded the chiropractic profession in 1895 and opened his first school in Davenport, Iowa, in 1898. Two of the first graduates of that program, Doctors John and Eva Marsh, brought chiropractic education to Portland in 1904 when they opened the Marsh Chiropractic School and Cure. In 1907, Dr. William Powell, one of the first graduates of the Marsh School, joined with Dr. John Marsh to incorporate and expand the Marsh School, changing its name to Pacific College of Chiropractic.

Dr. D.D. Palmer, who had visited Oregon in 1902, and Dr. John LaValley founded a second chiropractic school, the D. D. Palmer College of Chiropractic, in 1908. In 1911, Dr. LaValley reorganized the college, changing the name to Oregon Peerless College of Chiropractic-Neuropathy. It was here that human dissection was first placed on the curriculum of an Oregon chiropractic school. In 1913, Peerless College merged with the Pacific College of Chiropractic, becoming the Pacific Chiropractic College. In 1932, the Pacific Chiropractic College was reorganized and became Western States College. In 1937, the Health Research Foundation was formed as a non-profit organization under which Western States College operated. The college also offered a degree in naturopathy from the mid-thirties through the mid-fifties. In 1946, the college relocated to southeast Portland, and then, in 1973, moved to its current 22-acre campus in northeast Portland. In 1967, the school's name changed to Western States Chiropractic College (WSCC).

WSCC has pioneered many facets of chiropractic education. It was the first chiropractic college to establish a four-year course of study; one of the first to be transferred from private ownership to non-profit status; the first to require two years of pre-professional requirements to enroll; one of the first to adopt a curriculum inclusive of all the basic sciences; and the first to be awarded a federal research grant.

In 2010, Western States Chiropractic College became the University of Western States (UWS). This transition fulfilled the board and administration's plan to expand the institution's educational offerings at the undergraduate and graduate levels to establish a diversified spectrum of offerings in integrated health care.

Presidents of Western States include Drs. W.A. Budden (1929-1954), Ralph Failor (1954-1956), Robert E. Elliot (1956-1974), Samuel G. Warren (1975-1976), Richard H. Timmins (1976-1979), Herbert J. Vear (1979-1986), William H. Dallas (1986-2003), and Joseph Brimhall (2003-present).

See more on [Western States history](#).

## **Accreditation**

Accreditation is the voluntary process by which institutions of higher education assure and continuously improve the quality of their academic programs and supporting systems. UWS holds both regional and programmatic accreditation.

## **Regional Accreditation**

The University of Western States is accredited by the [Northwest Commission on Colleges and Universities](#).

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future.

Institutional integrity is also addressed through accreditation. Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

**Northwest Commission on Colleges and Universities**  
8060 165th Avenue N.E., Suite 100  
Redmond, WA 98052  
(425) 558-4224  
[www.nwccu.org](http://www.nwccu.org)

## **Program Accreditation**

Specialized programmatic accreditation offers an additional level of accreditation for certain academic programs. Specialized accreditation organizations are approved by the U.S. Department of Education Office of Postsecondary Education to evaluate and accredit degree and certificate programs using very specific criteria.

### **Doctor of Chiropractic Program**

The doctor of chiropractic degree program at the University of Western States is awarded programmatic accreditation by the Council on Chiropractic Education (CCE), 8049 North 85th Way, Scottsdale, AZ 85258-4321. Tel: (480) 443-8877, Website: [www.cce-usa.org](http://www.cce-usa.org).

### **Massage Therapy Program**

The massage therapy program at the University of Western States is awarded programmatic accreditation by the Commission on Massage Therapy Accreditation (COMTA), 5335 Wisconsin Avenue, NW, Suite 440. Washington, D.C. 20015. Phone: (202) 895-1518, Website: [www.comta.org](http://www.comta.org).

## **Degree Authorization - State of Oregon**

The [Oregon Office of Degree Authorization](#) approves the University of Western States to award degrees. The [Oregon Department of Justice](#) is the agency to which students may file a complaint for Oregon.



## Campus Facilities

The 22-acre UWS campus is located in a pleasant, residential neighborhood ten miles northeast of downtown Portland, near the western end of the Columbia River Gorge and National Scenic Area, offering majestic views of Mount Hood and Mount St. Helens. Campus facilities include state-of-the-art lecture halls and classrooms, laboratories, library, bookstore, cafeteria, a campus health center, and study and recreation areas. The UWS campus is a smoke-free environment.

**Hampton Hall** is a 16,000-square foot multipurpose facility in the center of campus. It houses three large, amphitheater-style multimedia lecture rooms each seating 100-150 students, a conference room, and a relaxing reception area.

**East and West Halls** contain lecture rooms and teaching laboratories specially equipped for chiropractic technique and massage instruction. West Hall also contains an x-ray technique lab used for providing hands-on instruction in radiographic positioning and technique.

The **Science Building** houses laboratories for instruction in histology, microbiology, neuroanatomy, radiographic anatomy, bone pathology and clinical laboratory diagnosis. This building also houses a specialty exercise physiology laboratory, the Fireside Student Lounge, a lecture room and the division of research offices.

The **Gymnasium** building houses a large multipurpose room and fitness center used for indoor recreational activities, such as basketball and volleyball, and for campus convocations and assemblies. The building also has two adjustive technique laboratories, the office of student services, the bookstore, and the Spinal Tap coffee kiosk.

The **Bookstore and Spinal Tap coffee kiosk** are housed within the gymnasium building. The bookstore offers new textbooks and reference materials, medical supplies, school supplies, study guides, UWS apparel, giftware, and food.

The **Student Assessment Center** houses faculty offices, the standardized patient training program, the campus massage clinic, and specialty rooms for teaching and learning patient examination skills. Clinical competency examinations are conducted in this facility.

The **Anatomical Sciences Building** is the newest facility on campus, completed in spring 2011. It houses a state-of-the-art gross anatomy dissection laboratory equipped with multimedia instructional technology, a sophisticated air exchange system, lockers for students, a conference room, and offices for basic sciences faculty.

The **Administration Building**, located on the east side of the campus, houses the office of the president, administrator offices, alumni relations and services, public relations, registrar, admissions, financial aid, financial services, human resources, several faculty offices, and the campus dining facility.

The **W.A. Budden Library**, within **Elliott Hall**, provides access to one of the largest health sciences collections in the Pacific Northwest. In addition to the extensive array of textbooks and print journals, the library has a broad range of electronic resources, including bibliographic databases, hundreds of online full-text scientific and medical journals, and streaming video instructional materials.

The **Massage Program-Salem** occupies nearly 5,800-square feet of space in the Health Sciences Building #8 on the Campus of Chemeketa Community College in Salem, Oregon (4000 Lancaster Drive NE). The space includes classrooms for massage instruction and office space.

## Health Centers of UWS

University facilities include a network of on and off-campus clinics for the delivery of health care services.

The **Campus Health Center (CHC)** is located on the main Portland campus. The CHC is equipped and staffed to provide health and wellness services to students, employees and the surrounding community. The center contains patient reception and business areas, evaluation and treatment rooms, clinical laboratory and radiology facilities, a rehabilitative exercise room, and an intern workroom. It houses the offices of clinic administrators, faculty members, and staff.

The clinic system extends to off-campus locations throughout the Portland metropolitan area.

### Gresham Integrated Care

#### Health Centers of UWS - East Portland

**Health Centers of UWS - Downtown Portland** is a member of the Coalition of Community Health Clinics, a group of 14 non-profit clinics that serve the healthcare needs of the uninsured and underinsured in Multnomah County.

**Health Centers of UWS - Salem** is on the campus of Chemeketa Community College.

The UWS clinic system further extends its reach by partnering to provide services at multiple clinic sites owned and operated by other entities throughout the region.

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## Campus Map



## Campus Visits

UWS invites all prospective students to visit campus, particularly while classes are in session. While visiting campus, prospective students are welcome to observe classes and speak with students and faculty members to gain an appreciation of the university, its mission, and exceptional instruction.

UWS also hosts a variety of campus recruiting events throughout the year. A complimentary night's stay at an area hotel is available for visitors traveling from outside the region. For additional information, please contact the office of admissions at (800) 641-5641 or [admissions@uws.edu](mailto:admissions@uws.edu).

## **Visitor Parking**

Visitor parking spaces are available in front of the administration building and east of the gym building. Visitors should register and obtain a parking permit from the cafeteria or bookstore if they will be on campus for more than the 30-minute visitor space time limit.

## **Student Parking and Transportation**

Because UWS is located in a residential area, parking is regulated and monitored by the city of Portland. The terms established by the city prohibit on-street parking. The neighborhood agreement requires that the university promote utilization of alternative transportation to curtail the amount of traffic to and from the university. To comply with city requirements, the university pays student public transportation fees, requires all employees and students to file quarterly transportation/parking declarations, and charges parking fees. For occasional driving to campus, the Chiro Café and the bookstore offer daily parking passes.

Students may park in unmarked parking spaces. Students parking in marked parking spaces designated for faculty and staff, reserved, visitor, handicapped, clinic, and loading zones will be fined. Motorcycle and scooter parking is available in the rear corner of the parking lot. Bicycle parking places are located in a number of locations on campus, including covered bike racks at the gymnasium.

Students who declare that they are not driving to campus may receive a free transit pass and are allowed to drive to campus no more than three times a month. Bus tickets are available at 50% of the cost as an incentive for those who drive to consider alternate commute options. Bus riders should visit [www.trimet.org](http://www.trimet.org) to learn more about trip planning, route schedules and information about how to use the bus and Max electric train. The main UWS campus is most directly served by Line 23 which stops at NE 132<sup>nd</sup> and Sacramento, but provides limited service Monday thru Friday. Lines 77 (Halsey) and 71 (NE 122<sup>nd</sup>) provide more frequent service but requires a  $\frac{3}{4}$  mile walk to campus.

# Academic Calendar 2015-2016

## Fall Term 2015

Event	Days	Date
Massage New Student Welcome Day	Thursday	October 1
DC New Student Welcome Day	Friday	October 2
CCEB Component A, B, & C Exam	Sat-Sun	October 3-4
First day of class	Monday	October 5
OBCE Exam	Friday	October 30
NBCE Part IV Exam	Sat - Mon	November 13-15
CCEB Component A, B, & C Application Deadline	Friday	December 4
Thanksgiving Holiday - <b>UWS Closed</b>	Thu-Fri	November 26-27
Last Day of Class	Friday	December 11
Commencement	Friday	December 11
Finals Week	Mon-Fri	December 14-18
Break	Sat-Sun	December 19 - January 3
OBCE Application Deadline	Tuesday	December 29

## Fall Term 2015 - Massage in Salem

Event	Days	Date
Massage New Student Welcome Day	Friday	September 25
First day of class	Monday	September 28
Veteran's Day Holiday Observed <b>CCC School Closed</b>	Wednesday	November 11
Thanksgiving Holiday - <b>UWS Closed</b>	Thu-Fri	November 26-27
Last Day of Class	Friday	December 4
Finals Week	Mon-Sat	December 7 - 12
Break	Sun-Sun	December 13 - January 3

## Winter Term 2016

Event	Days	Date
DC New Student Welcome Day	Monday	January 4
First day of class	Monday	January 4
NBCE Parts I, II, III & PT Applications Due	Tuesday	January 12
Assembly Schedule in honor of MLK Holiday	Monday	January 18
NBCE Parts I, II, III & PT LATE Applications Due	Tuesday	January 26
OBCE Exam	Friday	January 29
NBCE Part IV Applications Due	Tuesday	February 16
CCEB Component A, B, & C Exams	Sat - Sun	February 6-7
President's Day Holiday Observed - <b>UWS Closed</b>	Monday	February 15
Last Day of Class	Friday	March 11
Finals Week	Mon-Fri	March 14-18
NBCE Parts I, II, III & PT Exams	Fri-Sun	March 18-20
OBCE Exam Application Deadline	Tuesday	March 29
Break	Sat-Sun	March 19 - April 3

## Winter Term 2016 - Massage in Salem

Event	Days	Date
First day of class	Monday	January 4
MLK Holiday - <b>CCC Closed</b>	Monday	January 18
President's Day Holiday Observed - <b>UWS Closed</b>	Monday	February 15
Last Day of Class	Friday	March 11
Finals Week	Mon-Sat	March 14-19
Break	Sat-Sun	March 20 - 27



## Spring Term 2016

Event	Days	Date
Massage New Student Orientation	Thursday	March 31
First day of class	Monday	April 4
CCEB Component A, B & C Application Deadline	TBA	TBA
OBCE Exam	Friday	April 29
NBCE Part IV Exam	Fri-Sun	May 13-15
Memorial Day Holiday - <b>UWS Closed</b>	Monday	May 30
Last Day of Class	Friday	June 10
CCEB Components A, B & C Exams	Sat-Sun	TBA
Finals Week	Mon-Fri	June 13-17
Commencement	Friday	June 17
OBCE Exam Application Deadline	Wednesday	June 29
Break	Sat-Sun	June 18 - July 3

## Spring Term 2016 - Massage in Salem

Event	Days	Date
Massage New Student Welcome Day	Friday	March 25
First day of class	Monday	March 28
Memorial Day Holiday Observed - <b>UWS Closed</b>	Monday	May 30
Last Day of Class	Friday	June 3
Finals Week	Mon-Sat	June 6-11
Break	Sun-Sun	June 12 -TBA

## Summer Term 2016

Event	Days	Date
Independence Day Observed - <b>UWS Closed</b>	Monday	July 4
First day of class	Tuesday	July 5
NBCE Parts I, II, III & PT Applications Due	Tuesday	July 12
NBCE Parts I, II, III & PT <b>LATE</b> Applications Due	Tuesday	July 26
OBCE Exam	Friday	July 29
CCEB Components A, B & C Application Deadlines	Friday	TBA
NBCE Part IV Application Due	Tuesday	August 16
Labor Day Holiday	Monday	September 5
Last Day of Class	Friday	September 9
Finals Week	Mon-Fri	September 12-16
NBCE Parts I, II, III & PT Exams	Fri-Sun	September 16 - 18
Break	Sat-Sun	September 17- October 2
CCEB Components A,B & C Exams	Sat-Sun	TBA
OBCE Exam Application Deadline	Wednesday	September 28

## Fall Term 2016

Event	Days	Date
Massage Welcome Day	Thursday	September 29
DC New Student Welcome Day	Friday	September 30
First day of class	Monday	October 3
OBCE Exam	Friday	October 28
NBCE Part IV Exam	Fri-Sun	November 11-13
CCEB Component A, B, & C Application Deadline	Friday	TBA
Thanksgiving Holiday - <b>UWS Closed</b>	Thu-Fri	November 24-25
Last Day of Class	Friday	December 9
Commencement	Friday	December 9
Finals Week	Mon-Fri	December 12-16
Break	Sat-Sun	December 17 - January 4
OBCE Exam Application Deadline	Tuesday	December 27

## Tuition and Fees

The Board of Trustees approves tuition rates and fees each winter, which ordinarily become effective at the beginning of the summer term. The university makes every effort to keep costs to students at the lowest level consistent with its commitment to the highest quality educational preparation for professional practice.

### Tuition and Fee Assessment

Tuition and fees are assessed for all students on the first day of each term of enrollment in accordance with the applicable program tuition and fee schedules found on the UWS website and in the offices of admissions, financial services, and financial aid. Students enrolled in the DC and massage programs are charged a flat tuition rate as long as they are at or above the full-time credit load. Students taking single courses, or those enrolled in master's programs, are charged on a per-credit basis. Tuition and fees are not adjusted for course exemptions. Please refer to [Policy 1209 Course Exemption](#) or contact the registrar for more information.

### Course Registration and Enrollment Confirmation

The process for quarterly course registration and confirmation of enrollment is completed electronically. Students are able to log in to *myUWS* to confirm their enrollment, tuition, and fees each term. A student on "hold" status must clear any holds in order to register. The office of the registrar disseminates information on changes to the registration/confirmation process as new procedures are implemented.

### Drop Add Period

During the first five calendar days of the term, a student may change enrollment status without financial penalty or impact on academic standing. After the first five calendar days of the term, students dropping a course or cancelling enrollment from the university may be eligible for a prorated refund of certain tuition and fees. **Note:** Students in the DC program are not permitted to unilaterally drop or not enroll for a course to lighten their course load. DC students are not permitted to drop a core curriculum course because they are performing poorly, unless authorized by the dean. Please refer to [Policy 1215 Drop Add](#) for more information.

A student wishing to drop a course or change enrollment must submit a completed drop/add form to the registrar. The registrar will record the appropriate withdrawal grade (W or WF). Any amount of tuition and fee refund is subject to [Policy 3021 Tuition and Fee Refunds](#).

### Tuition and Fee Statements and Balances

Student statements are published on myUWS website on the first and sixteenth of each month. If the first or sixteenth falls on a weekend or holiday, statements are published on the next business day. Student account balances are available on myUWS website. Statements include transactions that have occurred since prior statement. Balances are updated in real time as transactions are posted to the account.

### Tuition and Fee Payment

Prior to matriculation, students are required to sign a statement acknowledging their personal responsibility for tuition, fees, and other charges incurred, which remains in effect for the duration of enrollment. Please refer to [Policy 3025 Student Financial Responsibility](#).

Payment of tuition and fees is due on or before the first day of the term. Interest begins accruing on the first day of the term. However, a grace period is granted until the last business day of the first month of the term in order to make payment arrangements with the office of financial services. On the last business day of the first month of the term, a full month's interest at 18 percent per annum will be assessed on the unpaid balance. Interest will continue to accrue each subsequent month where a balance remains. Payments for any new charges during the term are due by the last business day of the same month. Students who fail to make payment arrangements with the office of financial services by the end of the first month of the term may be prohibited from attending classes.

### Tuition and Fees - Course Audit

Under special circumstances, the dean may authorize a student to audit a course. In such cases, tuition is charged at one-half the regular rate, plus any other applicable fees. Grades are not awarded for course audit.

### Tuition Deferment Plan

The tuition deferment plan offers enrolled students the option of paying for their quarterly education costs in up to three equal installments over the course of the term. A one-time fee of \$30 is due at time of application to use this payment method. Each payment is due to the office of financial services by the last business day of the month or last day of the term, depending upon the terms of payment. When making regularly scheduled payments, interest is not charged to the student's account. In the event of a late or missed payment, interest will be charged on the past due balance. All balances must be paid by the last day of the term.

## Residual Checks

Financial aid and other payments received by the university are applied to student accounts within three business days of receipt. If payments are received in excess of tuition, fees, and other student account charges, a residual check will be issued to the student to assist with the cost of books, supplies, and other living expenses for the term.

## Past-Due Accounts

Any balance due to the university after the first month of the term constitutes a past-due debt. Payment of past-due debts including, and not limited to, accrued interest and/or late fees must be made prior to continued attendance or receipt of a diploma. Any past-due debt to the university is grounds for termination of campus privileges regularly granted to students or alumni.

In extreme cases, past-due student account balances may be assigned to an external collection agency or to an attorney for litigation. If the account has been assigned to a collection agency, UWS can no longer accept payments on the account. Therefore, payments must be made directly to the agency responsible for collection of the debt. UWS will restrict registration and/or release of transcripts until UWS receives the past due amount in full from the collection agency.

## Leave of Absence or Withdrawal

[Policy 1239 Leave of Absence and Withdrawal](#) describes the processes for taking an approved leave of absence and for permanent withdrawal from the university. When a student wishes to take a leave of absence or to withdraw from UWS, it is the student's responsibility to complete the appropriate form/s and obtain the necessary clearances within a timely manner. Any student who stops attending during a term and does not submit the appropriate documentation to process a leave of absence or withdrawal within five days from his/her last date of attendance will be administratively withdrawn and any applicable financial aid funds will be returned. Pursuant to [Policy 3025 Student Financial Responsibility](#) and [Policy 3021 Tuition and Fee Refunds](#), students are responsible for financial obligations to the university resulting from the return of financial aid funds. If a student fails to properly complete and submit the necessary form/s and does not register for and attend classes by the close of the non-penalty drop/add period, s/he will be administratively withdrawn from the university and any financial aid will be returned.

## Tuition and Fee Refunds

After the drop period, students cancelling enrollment from the university during the term may be eligible for a prorated refund of certain tuition and fees. Enrollment cancellation or deferral may result from withdrawal, leave of absence, or dismissal. When enrollment is cancelled during the first 60 percent of the term, the university will apply refunds to student accounts, calculated on a pro rata basis, in accordance with [Policy 3021 Tuition and Fee Refunds](#). After 60 percent of the term has elapsed, students are no longer eligible for a refund for that term. Refunds will first be applied to any outstanding balance owed to the university.

The student is responsible for any unpaid tuition and fee charges due to the university, and where applicable, federal regulations determine the portion of federal student aid funds that must be returned to the program in cases of withdrawal and/or leave of absence. The student must repay UWS for all federal student aid returned on his or her behalf in accordance with federal regulations, as determined by the U.S. Department of Education's Federal Student Aid programs. Please refer to the "Impact of Withdrawals and Leave of Absence on Financial Aid" section in the financial aid section of this catalog for more information on federally-mandated requirements on returning federal student aid funds.

## Admissions

The University of Western States welcomes application for admission from prospective students who are interested in our educational programs. Acceptance to the university will be offered to students who are considered desirable applicants under the terms of the selection criteria listed below.

### Admission Criteria

UWS strives to admit students who are most likely to succeed in the UWS educational programs; will go on to pass licensure exams; and will succeed as health care professionals. The application process is designed to afford maximum opportunity for prospective students to present a comprehensive academic history and résumé.

Qualification is based on assessment of all available information. The applicant's academic record is important. The university looks for achievement and consistency, especially in academic performance. Students' formal and informal presentations of themselves through written materials, telephone interaction, campus visits, and interviews are also important. It is expected that applicants make a logical and articulate connection between their employment, volunteer, academic, and other experiences and the desire to pursue education at UWS. The university values conscientious, ethical, and mature handling of admissions and other interactions. The university looks for informed thoughtfulness and commitment, as well as evidence that there is a good match between the character, expectations, and goals of the prospective student and those of UWS programs. In addition, the university looks for indications that the student is prepared for the responsibilities to society inherent in being a licensed health care professional.

Evaluation for admission begins when a complete application package has been received. Applicants will be accepted on the basis of the professional judgment of the admissions staff, as well as the availability of space in the program. UWS reserves the right to deny admission for any reason other than those prohibited by law and, based on updated information, to reconsider and retract any candidate's acceptance prior to enrollment.

Candidates for admission must possess physical and other abilities that allow them to meet performance standards required of all UWS students. For details of these requirements, refer to the technical standards below.

### Articulation Agreements

UWS maintains articulation agreements with a number of undergraduate colleges and universities. These agreements or memorandums of understanding are designed to facilitate enrollment for students who wish to pursue additional degrees at UWS in a manner that enables students to save both time and money. Information on articulation agreements may be found on the [UWS website](#) and through the office of admissions. Current articulation agreements include:

Avila University, Kansas City, MO  
Camosun College, Victoria, BC, Canada  
Chemeketa Community College, Salem, OR  
Fairleigh Dickinson University, Teaneck, NJ  
Oregon State University, Corvallis, OR

Portland State University, Portland, OR  
Simon Fraser University, Vancouver, BC, Canada  
South Dakota State University, Brookings, SD  
Viterbo University, LaCrosse, WI

### Policy of Non-Discrimination

University of Western States offers equal opportunity to all persons without regard to race, creed, color, sex, sexual orientation, gender identity, marital status, familial status, national origin, religion, age, physical and mental disability, genetic information, family medical history, legal source of income, veteran status, or other status protected by law for all UWS policies and programs. Please refer to [Policy 1013 \(B\) Equal Opportunity and Non-Discrimination](#).

### Diversity

[Policy 3409 \(B\) Diversity](#) promotes diversity of employees and students. UWS strives to enroll a diverse student body to help ensure that the university, its programs, and related health professions are enriched through the participation of individuals from different racial, cultural, and ethnic backgrounds. In addition, the board encourages the administration to hire qualified employees with a goal of increasing diversity and gender balance within university personnel.

### Technical Standards

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in their respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll, with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

### Notification of Admission Decisions

Applicants are reviewed on a rolling basis when the necessary documents have been received and assembled in the office of admissions. The application review process typically takes two weeks and leads to one of these decisions:

- **Full Acceptance**  
Documentation confirms that all prerequisites have been met and evaluation shows the applicant meets all objective and subjective selection criteria.
- **Conditional Acceptance**  
The application file includes enough information for the admissions staff to judge that the applicant seems likely to meet the standards for acceptance even though some prerequisites still remain to be completed. Full acceptance will be offered once all conditions have been fulfilled.
- **Denial**  
The information presented does not meet UWS selection criteria. To put a denial in perspective, applicants should carefully read the selection criteria section of the catalog and compare it to their perceptions of their own application. Except in the case where a rejection is the result of failure to meet objective prerequisite minimums, the decision will not be open to discussion. A denied applicant may choose to update their credentials and resubmit an application at a



later time. In such cases, candidates are advised to do so only when they have a clear strategy for strengthening their application.

On occasion, even when all necessary documents have been received, some questions may still remain. This situation may arise, for instance, when the amount of completed science coursework at the time of application to the DC program is insufficient for the admissions staff to assess relevant academic strength. In such instances, the applicant will be given opportunity to update his/her admission file prior to a decision being made.

### **Provisional Enrollment**

Provisional enrollment is intended for applicants who meet the academic admission requirements for a program but are missing some of the required admissions materials, which include and are not limited to official transcripts, TOEFL, GRE or MAT test scores, and/or letters of recommendation.

The office of admissions determines academic eligibility for provisional enrollment. Students admitted under provisional enrollment must submit all outstanding items prior to the last day of the first term of enrollment. Provisionally admitted students who do not meet the end-of-quarter deadline will be ineligible to enroll in the next term. Extended deficiency may lead to dismissal from the university. Please refer to [Policy 2008 Provisional Enrollment](#) for details.

### **Tuition Deposits**

When an offer of acceptance is made, applicants are expected to pay a non-refundable tuition deposit to secure a seat in the desired entering class. The tuition deposit is applied toward the first term tuition. If the deposit is not received or arrangements made with the office of admissions by the stated deadline, the offer of acceptance may be withdrawn.

### **Deferment or Transfer of Entry Date**

UWS accepts students to enroll with a specific entering class and entry date. Written requests to change enrollment to a different entry date are considered on a case-by-case basis. If approved, the student will be expected to pay a non-refundable deferment deposit that will be recorded as additional credit toward the student's tuition for his/her first enrolled term.

### **Criminal Record**

All applicants and enrolled students must reveal any criminal record and cooperate by providing full information for review as it may pertain to the health professions program and licensure. Following the guidelines of the professional licensing agencies, UWS holds that felony convictions - and certain non-felony convictions - are probable grounds for denial of admission or of continued enrollment. In accordance with federal student aid regulations, in some instances, a criminal record may also disqualify a student from financial aid eligibility.

### **Readmission**

Under [Policy 2006 Readmission](#), an individual who has withdrawn, taken an unauthorized leave of absence, failed to return from an authorized leave of absence as agreed, failed to enroll in courses, or been dismissed may apply for readmission. The individual desiring readmission must submit an application with the required application fee and must meet the admission and degree requirements at the time of application for readmission. The application for readmission must include a written submission addressing the events associated with the lapse, a critical analysis of these events, and a plan to ensure that similar actions will not reoccur should the individual be readmitted. The Admissions Committee will consider the merits of the application and make a recommendation to the vice president of enrollment. The readmission application should include:

- Completed application and application fee
- Petition for readmission explaining the student's circumstance
- Official transcripts of any intervening education
- A written recommendation from at least one UWS faculty member

If a student is accepted for readmission, special terms and restrictions may be applied including, and not limited to, courses accepted back into the program for degree credit, course retake/s, and a period of academic probationary status. A readmitted student may have limited access to financial aid for repeating course work previously attempted.

Appeal of the outcomes of the readmission process must be made, in writing, to the vice president of enrollment, whose decision is final. There is no obligation on the part of the university to readmit any individual to a program from which s/he has been withdrawn, dismissed, or who has voluntarily withdrawn.

# Financial Aid

The University of Western States administers an extensive program of student financial aid to enable students to pursue their desired education, regardless of their personal financial situations. Recognizing that professional education is costly, students should consider the expense of their total education and research available sources of funding. Student employment, including federal work study, is available on campus.

## Eligibility for U.S. Federal Student Aid

To qualify for U.S. financial aid, students must meet the following requirements:

1. Be a U.S. citizen or an eligible non-citizen.
2. Complete a FAFSA each academic year and provide all requested documents to the office of financial aid.
3. Be registered with Selective Service, if the student is male and was born on or after January 1, 1960.
4. Not owe a refund to any federal student grant program, nor be in default on any federal student loan.
5. Maintain Satisfactory Academic Progress (SAP) under [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).
6. Other rules may apply.

## How to Apply

Eligible students may apply for financial aid by completing and submitting a Free Application for Federal Student Aid (FAFSA). Applying online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) is recommended. If a paper application is necessary due to disability, contact the Office of Financial Aid. The FAFSA is available in January of each year for the upcoming school year (summer through spring). When completing the FAFSA, enter UWS's Federal School Code: 012309.

As part of the application review and verification process, the student may be asked to submit a copy of his/her completed federal income tax transcript, W-2s, verification worksheets, and/or other documents to the office of financial aid. Successful use of the "IRS Data Retrieval Tool" while filing the FAFSA may reduce the likelihood of needing to submit additional documentation. The office of financial aid will notify admitted students if further information is needed after the FAFSA is filed.

## Calculating Eligibility

The information provided on the FAFSA is used to determine the student's expected family contribution (EFC). This number appears in the upper right hand corner of the Student Aid Report (SAR). The EFC functions as an eligibility index that determines eligibility for certain aid programs.

## Cost of Attendance

The cost of attendance (COA) is the estimated total cost of the student's program of study. It includes charges assessed by the university (tuition and fees), as well as other expenses not charged by the university but which a typical student may incur while attending school including books and supplies, room and board, transportation, and other miscellaneous personal expenses.

The cost of attendance represents the maximum amount the student may receive in all forms of educational funding, including student loans, scholarships, work study, and grants. Any funding received that is dependent upon student status is considered educational funding and students are required to report all such funding to the office of financial aid, which includes alternative loans borrowed from private lenders.

Current cost of attendance figures are available on the UWS website. Individual student living arrangements and personal spending habits vary widely. With careful planning and budgeting, it is possible to spend significantly less than the estimated expenses, enabling students to minimize indebtedness.

## Award Process

Review of financial aid applications begins in March each year in preparation for the following summer term for continuing students, or fall/winter for newly admitted DC students. If additional information has been requested, such as tax returns, verification worksheets, etc., the application will be reviewed after all requested documents are received. Financial aid applications are reviewed on a continuous basis throughout the academic year.

Once the application has been reviewed and the student has been admitted to a program of study, the office of financial aid will send the student a financial aid package. New students will receive the award package by mail, including two copies of the financial aid award letter, along with instructions on completing the necessary steps to receive those funds. Continuing students will receive an email containing an electronic copy of his/her award, and an instruction sheet. Students should review all of the information included within their financial aid package and follow all instructions to ensure timely delivery of funding each term.

# Financial Aid Awards

## Federal- and State-Funded Financial Aid Programs

Federal- and state-funded financial aid eligibility is dependent upon factors specific to an individual applicant, primarily your academic program of study. Students are considered for all award types available to them. Information on available aid is listed by academic program in this catalog and on the [UWS website](#).

## Scholarships for New Students

A variety of scholarship opportunities are available to new students. Current opportunities are listed by academic program on the [UWS website](#). Scholarships and grants awarded to eligible students enrolled at less than full-time status may be prorated. In the event of enrollment cancellation in any term where institutional aid is received, the amount will be prorated in accordance with [Policy 3021 Tuition and Fee Refunds](#).

## Community Service Scholarships for Current Students

An important element of the UWS mission is to encourage students to participate in activities and projects that provide meaningful service to the campus, their chosen profession, and the community. The UWS Community Service Scholarship was established to support student engagement in such activities.

Scholarships will be awarded to recipients chosen by a selection committee. Scholarship amounts will be determined based on a number of factors, including available funds and the strength and number of applications received each award cycle. Current students will be notified of this opportunity by email.

## Other Non-Federal Sources of Funding

Admitted students in all programs may be eligible for non-federal sources of funding such as the following:

### Scholarships from external sources

- A number of private organizations offer scholarships. Each organization will have its own deadlines, criteria, and application processes.
- Certain providers, such as Standard Process and Bob's Red Mill offer scholarship opportunities specifically for UWS students. The office of financial aid sends notices to all current students of available scholarships and deadlines on a monthly basis.
- [www.fastweb.com](http://www.fastweb.com) is one resource to help students search for scholarships.

### Alternative Loans (non-federal loans borrowed through private lenders)

- Can be borrowed to cover the entire cost of attendance, minus any other financial assistance.
- Credit check required; co-signer may be required in some cases.
- May have higher interest rates and less favorable repayment terms than government-funded student loan programs.
- Displaces federal student aid. It is recommended that the student exhaust federal student loan options in lieu of, or prior to, borrowing alternative loans.

## Satisfactory Academic Progress for Financial Aid Eligibility

Federal regulations require all students receiving federal student aid to make satisfactory academic progress (SAP) toward a degree or certificate in order to retain eligibility for financial aid. Failure to maintain SAP, including minimum cumulative GPA and adequate progress toward degree completion, will result in the disqualification from federal student aid programs at UWS. Please refer to [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

## Impact of Withdrawal or Leave of Absence on Financial Aid

[Policy 1239 Leave of Absence and Withdrawal](#) describes the processes for taking an approved leave of absence (up to one year) and for permanent withdrawal from the university. Students' who withdraw, take a leave of absence, or cease attending classes during a term of enrollment may face financial aid eligibility consequences in accordance with [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

U.S. Department of Education regulations require the office of financial aid to perform a "Return to Title IV" (R2T4) calculation for any aid recipient who ceases enrollment while a term is in progress. The calculation of funds that must be returned is based chiefly upon the percentage of the term attended by the student, establishing the amount of aid considered "earned" by the student. The R2T4 must be performed and funds must be returned regardless of the manner in which a student withdraws. For example, if a student ceases attendance at UWS but does not complete the official withdrawal paperwork with the registrar, the office of financial aid must research an appropriate last date of attendance or date on which the student indicated his or her intent to withdraw to any university staff or faculty member.

"Unearned" funds must be returned to the U.S. Department of Education. Refunded tuition/fees may be applied to the balance owed to cover unearned aid funds. However, the office of financial services will bill the student for any remaining

balance. Questions about refunds should be directed to the office of financial aid and/or office of financial services for clarification. Please refer to [Policy 3021 Tuition and Fee Refunds](#).

### **Emergency Loans**

The H.H. Peters Loan Fund was established to assist doctor of chiropractic students in Quarter 2 or above who demonstrate a verifiable need, no other source of funds, and can show an ability to repay the loan on time. Eligibility criteria for emergency loans include academic standing, enrollment, and other requirements under [Policy 3801 Emergency DC Student Loans](#). Application for emergency loans may be made with the office of financial aid. Loans must be paid in full prior to registering for the next term, prior to the end of the student's final term, or prior to 60 days from the issuance date, whichever is sooner.

### **Loan Repayment Responsibilities**

As the primary beneficiary of his/her education, the student bears the primary responsibility for meeting educational costs. Prospective student borrowers should seriously consider the repayment obligations they assume prior to borrowing to finance their school and living expenses. Students must repay any and all student loans borrowed and comply with any provisions agreed to in obtaining those loans.

Cost of borrowing, loan repayment, and debt management information is available from the office of financial aid. All entering student borrowers receive debt management and repayment information along with other loan information as part of their online entrance interview. Several different loan repayment plans are available to help borrowers successfully manage loan repayment. Loan forgiveness options may be available under certain specific provisions in the law.

Borrowers are also required to have an exit interview upon graduation, withdrawal, leave of absence, or dismissal. Whenever possible, this exit interview should be completed prior to separation from the university. Exit interviews may be completed online or in person. In addition, it is the student's responsibility to notify the office of financial aid of any change in enrollment status, such as switching from full- to part-time enrollment.

The base repayment period for federal loans including Federal Perkins is a 10-year standard rate plan billed on a monthly basis with a \$50/month minimum. Actual payments depend on the total borrowed while at UWS and payment plan selected. Non-federal student loans have terms that vary based on the specific contract you sign. Any student who is considering applying for a non-federal student loan is advised to consult with the financial aid staff members about his/her situation and options.

### **Loan Consolidation**

By consolidating loans following graduation or withdrawal from UWS, a student may combine multiple federal loans, including Federal Perkins, into a single federal student loan with a single servicer and interest rate. Loan consolidation after graduation can simplify managing of your repayment. Depending on the amount borrowed, borrowers can arrange to have up to 30 years for repayment of loans, and may choose from a variety of repayment plans to best suit their financial situation. Additional information is available from the office of financial aid.

### **Veterans Benefits**

Students at UWS are eligible to use most veterans' benefits they would be eligible to use at a college or university including vocational rehabilitation. UWS also participates in the Yellow Ribbon program. Students who are veterans or dependents of veterans may qualify for benefits. Call 1-888-GI-BILL-1 or go to [www.gibill.va.gov](http://www.gibill.va.gov) for more information.

Any veteran receiving GI Bill benefits while attending UWS is **required** to obtain transcripts from all previously attended schools and submit them to the registrar (VA school official) for review of prior credit.

Students eligible for veterans' educational benefits must complete an enrollment certification form and submit a copy of their eligibility letter to the registrar. Students may begin this process prior to entry, but no funds will be released until they register and attend classes. Veterans must be making satisfactory academic progress and be in good academic standing in accordance with the academic policies described in this catalog. Contact the office of the registrar for processing or the student's regional Veterans Affairs office for more information on available programs.



# Academic Policies

University of Western States academic policies are designed to ensure orderly, organized, fair, and focused progress through university programs. Students are required to be familiar and compliant with university policies and procedures as published by the university. These include policies for conduct, grooming and dress, academic standing, and other matters crucial to the development of professionalism. The policies and expectations listed in this catalog are not all-inclusive. Students are directed to [Udocs](#) on the UWS website for all policies relevant to student life.

## Academic Standing - DC Program and Undergraduate Studies

The University of Western States seeks to maintain the highest academic standards for students enrolled in its academic programs and recognizes the need to identify students who are unable to achieve or maintain satisfactory academic standing. Students must pass all program requirements and conduct themselves in a manner that is consistent with the expectations of the university to qualify for graduation from that program. Students failing to meet the criteria below will be placed on the appropriate level of academic sanction.

### Academic Probation

A student will be placed on academic probation when s/he:

- Earns a term GPA below 2.0.
- Earns an unsatisfactory grade in a course or on a clinical skills assessment (CSA) exam. Unsatisfactory grades include:
  - NP or F in any course or on a clinical skills assessment (CSA) exam.
  - D in any course other than DC basic science courses and specified courses in the massage program. The list of specified massage program course is available in the office of the registrar.

### Permanent Academic Probation

A student will be placed on permanent academic probation when s/he:

- Earns an unsatisfactory grade in a course or on a clinical skills assessment (CSA) exam on the second attempt.
- Non-DC Programs: Earns a term GPA below 2.0 for the second time. The two terms need not be consecutive.
- DC Program: Earns a term GPA below 2.0 for the second time after the first three academic terms. The two terms need not be consecutive.

### Academic Dismissal

A student will be academically dismissed when s/he:

- Earns a term GPA less than 1.25 in the first term of enrollment.
- Earns a term GPA less than 2.0 for the second time during the first three terms of enrollment (DC students only).
- Earns a term GPA less than 2.0 for the third time. The three terms need not be consecutive.
- Earns an unsatisfactory grade in a course or on a clinical skills assessment (CSA) exam on the third attempt.

For complete policy information, see [Policy 1233 Academic Standing DC and Undergraduate Programs](#).

## Academic Standing - Graduate Studies

[Policy 1234 Academic Standing Graduate Studies](#)

### Minimum Grade Requirements

A minimum grade point average (GPA) of 3.0 is required in each term, as well as a cumulative GPA of 3.0 throughout the program. D and F grades do not apply toward a graduate degree, but are used to calculate the GPA. A graduate student who receives a D or F grade may repeat the course for credit. However, the original and repeated course grades are recorded on the student's transcript and calculated into cumulative GPA.

### Academic Probation

A graduate student will be placed on academic probation if his/her cumulative GPA falls below 3.0. The student's probationary status must be rectified during the next term for which the student enrolls or else the student will be placed on permanent academic probation.

A graduate student will also be placed on permanent academic probation when s/he earns a term GPA below 3.0 for the second time over non-consecutive terms.

## **Academic Dismissal**

A graduate student will be academically dismissed when s/he earns a term GPA less than 2.0 in the first term of enrollment or earns a term GPA less than 3.0 for the third time. The three terms need not be consecutive.

A graduate student who is academically dismissed may apply for readmission in accordance with [Policy 2006 Readmission](#).

## **Satisfactory Rate of Progress**

A graduate student must demonstrate a realistic rate of scholastic progress. Generally, graduate programs should be completed within five years of starting the program. A graduate student who exceeds the five-year enrollment period will be dismissed from the program. Such dismissal may be appealed directly with the dean of graduate studies in accordance with [Policy 9022 Student Appeal](#), Step 1.

**Note:** Federal regulations require all students receiving federal student aid to make satisfactory academic progress (SAP) toward a degree or certificate in order to retain eligibility for financial aid. Please refer to [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

## **Normal Progress toward Degree Completion**

Many legal, academic, medical, financial, and other institutional requirements exist in order for students to complete the academic programs in a timely manner. If one or more obligations to the university have not been met, a hold may be placed on a variety of campus privileges, including but not limited to, access to attendance, graduation, diplomas, or transcripts.

## **DC Program**

By design, the doctor of chiropractic program is highly structured to ensure logical and effective achievement of competencies. Under [Policy 1226 Normal Course Load and Progress \(DCP\)](#), DC program students are expected to enroll for a full quarter's coursework every term until all requirements for graduation have been completed. In some instances, courses must be taken in sequence, including any courses where client/patient care is delivered. Deviation from the prescribed sequence of academic progress must be approved by the dean. Students are not permitted to unilaterally drop or fail to enroll in a course/s to lighten their course load, nor are they allowed to drop a core curriculum course because they are performing poorly, unless authorized by the dean.

## **Other Programs**

Program sequencing is available within the individual program sections of this catalog.

## **Class Attendance**

A professional duty for health care practitioners includes ongoing engagement in learning opportunities. The university takes this responsibility seriously. Beyond the professional responsibility lies the public trust and regulatory body expectations that students (future health care providers) satisfactorily complete the coursework for the programs in which they are enrolled. Please refer to [Policy 1204 Attendance and Tardiness](#).

## **Religious Observance**

Any student who, due to religious beliefs, is unable to attend classes on a particular day will be excused from attendance requirements and from any examination or other assignment on that day. The student must work with the course instructor to schedule a makeup examination or other assignment prior to the religious observance. Any such makeup examination or assignment shall not create an unreasonable burden upon the university. No adverse or prejudicial effects will occur as a result of a student's inability to participate in the program during such observances. Please refer to [Policy 1223 Make-Up Examinations](#).

## **Leave of Absence**

When students wish to interrupt their studies for a period of time, with the specific intention of returning to complete the program, they should apply for a leave of absence with the registrar. A leave of absence, if granted, is for a specific period of time, after which the student is scheduled to return to the university and continue with his/her studies. The university may place specific conditions that must be met for return after the leave. Please refer to [Policy 1239 Leave of Absence and Withdrawal](#).

## **Withdrawal**

By withdrawing from a program, a student terminates his or her association with the program and affirms he or she has no intention to return. A student who withdraws and later wishes to return to that program must apply for readmission and the acceptance decision will be based on admission standards in effect at the time of re-application, as well as the former student's previous performance at UWS. Forms and instructions are available electronically and can be accessed via the office of the registrar. Please refer to [Policy 1239 Leave of Absence and Withdrawal](#).

### **Compelled Administrative Leave**

The university has expectations of student behavior reflective of emotional, psychological, and social soundness, and recognizes its obligation to protect students, employees, and patients from fear, harm, and harassment because of the psychological or physical condition or conduct of individuals or groups of students. Under [Policy 1225 Involuntary Withdrawal](#), when a student may be endangering the safety or academic progress of him/herself or others due to his/her physical, emotional, or behavioral status, the chief academic officer or other duly authorized personnel may elect to suspend or compel leave of absence of a student. This may include, but not be limited to, prohibition from communicating with campus constituents, being present on campus, and attendance at UWS-sponsored events, regardless of their location.

### **Normal Course Load and Progress - DC Program**

UWS programs are highly structured, by design, to ensure logical and effective accomplishment of required abilities and competencies. Therefore, under [Policy 1226 Normal Course Load and Progress DC Program](#), students are expected to enroll for a full course load every term, until all requirements for graduation have been completed. In some instances, courses must be taken in sequence, including any courses where client/patient care is delivered. Deviation from the prescribed sequence of academic progress can be achieved only through approval of the dean. Students are not permitted to unilaterally drop or not enroll for a course to lighten their course load, nor are they allowed to drop a core curriculum course because they are performing poorly, unless authorized by the dean.

Program sequencing is available within the individual program sections of this catalog. Many legal, academic, medical, financial and other institutional requirements exist in order for students to begin enrollment, progress through and complete the academic programs. If one or more obligations to the university have not been met, a hold may be placed on a variety of campus privileges, including but not limited to, access to attendance, graduation, diplomas, or transcripts.

### **Electives and Workshops**

Electives are intermittently offered in addition to the prescribed course of study within a program. In some cases electives are optional, while in others, students are expected to select a certain number of elective courses from a list of options. Electives are offered at times that may not subscribe to typical course scheduling norms. Tuition for elective courses is not included in base tuition costs. Therefore, enrolling in elective courses may require paying additional tuition and fees. Elective courses completed are reflected on the student's transcript with the name of the course and the grade received.

Workshops are occasionally taught under the umbrella of a program and are focused on enrichment rather than contributing to the core program. Thus, they are not reflected on a student's transcript. They are offered at times, arranged through the office of the registrar, with approval of the dean or program director, and may not subscribe to typical course scheduling structures. Tuition for workshops is not included in base tuition costs. Enrolling in workshops may require paying additional tuition and fees. Please refer to [Policy 1240 Electives and Workshops](#).

### **Exempting Courses/Advanced Standing**

UWS recognizes that students may have completed courses and achieved required competencies in specific areas prior to entering their program that are comparable to courses taught in the curriculum at UWS. Students with such academic credentials and competencies may be granted credit (advanced standing) for previously completed coursework if approved by the dean. Please refer to [Policy 1209 Course Exemption](#), [Policy 1216 Advanced Standing Graduate Studies](#), and [Policy 2007 Transfer Credit](#).

### **Directed/Independent Study**

The university does not normally accept any substitution for regular enrollment, attendance, and successful completion of every required course in the curriculum. [Policy 1236 Directed \(Independent\) Study](#) describes the terms under which a student may substitute directed study, with authorization of the dean.

## Grading System

Under [Policy 1207 Grading System](#), the UWS grading scale is as follows:

Grade	Definition	Quality Points	Condition
A	Excellent	4	
B	Good	3	
C	Satisfactory	2	
D	Poor	1	
F	Failure	0	
P	Pass	-	
NP	No Pass	-	
I	Incomplete	-	Incomplete activities must be completed by week four of the subsequent term of enrollment or automatic failure (F) will be recorded.
IP	In Progress	-	In progress activities must be completed by week 10 of the subsequent term of enrollment or automatic failure (F) will be recorded.
R	Remediation Required	-	Remedial activities must be completed by week 10 of the subsequent term of enrollment or automatic failure (F) will be recorded.
W	Withdrawal	-	Withdrawal before the end of week 6.
WF	Withdraw Failing	0	Withdrawal after week 6. Computed as a failing grade (F) in term and cumulative GPAs.
WA	Administrative Withdrawal	-	Non-return/registration following leave of absence. Unauthorized and/or lack of notice of withdrawal.
T	Transfer Credit	-	
X	Credit by Exemption	-	
AU	Audit	-	Not for credit

Only grades assigned for UWS courses will be used in computation of term and cumulative grade point averages.

Students must repeat courses for which unsatisfactory grades are earned. Unsatisfactory grades include:

- NP or F in any course
- D in any course other than DC basic science courses and designated massage program courses

A grade of IP, NP, P, or R may be assigned only in courses for which those grades are permitted. A list of such courses is available in the office of the registrar.

## Grade Appeal

[Policy 1211 Grade Appeal](#) describes the circumstances under which a final grade may be appealed.

An appeal of a final course grade or other final comprehensive evaluation grade must be based upon grounds that one or more of the following influenced the grade assignment to the student's disadvantage:

- Mathematical calculation or clerical error.
- Capricious or arbitrary method of grading
- Probable discrimination based upon race, color, gender, sexual orientation, marital status, national origin, national citizenship, religion, age, disability or veteran status of the student.
- Personal malice.
- Evidence of personal bias or other partiality
- Retaliation.

## Dean's List and Honors at Graduation

In accordance with [Policy 1242 Dean's List and Graduation Honors](#), students who achieve a term grade point average of at least 3.50, without any I, F, NP or D grades, are named to the dean's list. Graduation honors are conferred on the basis of the following cumulative grade point averages:

Honors	GPA
Summa Cum Laude	3.85-4.00
Magna Cum Laude	3.75-3.84
Cum Laude	3.50-3.74

All students, including transfer students, are eligible to receive honors at graduation.

## Academic Integrity

Academic integrity is the moral code of academia for the maintenance of academic standards. UWS students are expected to do their own work and refrain from all forms of academic dishonesty. Please refer to [Policy 9001 Student Conduct](#).

## Examination Procedures

To ensure fairness and objectivity in the student examination process, [Policy 1217 Examination Administration](#) describes the behaviors to which students are required to adhere before, during, or in the wake of examinations. Failure to do so may constitute a violation of expected conduct, which may result in dismissal from the university. More detail on expected student conduct is available in [Policy 9001 Student Conduct](#). Also see Academic Integrity.

## Make-up Examinations

Make-up exams are available to students who miss a test due to verifiable and legitimate circumstances in accordance with [Policy 1223 Make-up Examinations](#). Faculty and/or program deans will determine available times and dates for make-up tests. Students who need to request a make-up exam need to first communicate with the lead instructor of the affected course/s.

## Plagiarism

Plagiarism is a form of academic dishonesty consisting of the presentation of someone else's ideas, writings, or other original works as her/his own without appropriately attributing credit to the original source. It may include portions or the entirety of the original work. These original works include, but are not limited to: published works (books, journals, newspapers, magazines, theses, etc.), speeches, other student's papers or reports, proposals, graphics, images, multimedia, web pages, computer programs, research data, and presentations. Plagiarism by students at UWS is grounds for sanction up to, and including, dismissal.

## Cheating on Examinations, Assignments, or Other Work

[Policy 9001 Student Conduct](#) prohibits all forms of academic cheating. UWS defines cheating as actions that constitute cheating, promote cheating, or actions that create the appearance of cheating on an assessment of student learning (examination, test, quiz), assignments, or other coursework. Cheating includes any act or support mechanism employed after, during, or prior to an assessment that provides unfair or unauthorized advantage to a student, fellow test takers, or future students in the course, which includes attempted or unauthorized receipt, use, or provision of information, notes, learning aids, devices, or communication during an assessment. Cheating includes, but is not limited to:

- Copying the work of other students; allowing other students to copy one's own work.
- Unauthorized collaboration during a test or on an assignment.
- Falsification of identity on an assessment or assignment.
- Unauthorized use of electronic devices during an assessment.
- Changing answers on an assessment that has already been scored.
- Unattributed submission of papers produced by other persons or commercial entities.
- Use of unauthorized reference materials (including online resources) during online assessments.
- Unauthorized attempts to remove examination materials from the test area or to reproduce test materials for the purpose of allowing other persons to use those materials.
- Unauthorized access to current and/or past testing materials.
- All active and passive behaviors used alone or in collusion with others during a test. E.g., "crib sheets," signaling other test takers, verbal, digital, or electronic communications between students during a test, etc.
- Any behavior that would alter a completed test instrument after it has been handed to the proctor.
- Any attempt to preserve items from the test for future classes.

Students are expected to be mindful of their behavior in preparing for, taking, and following completion an assessment in order to avoid all forms of inappropriate test-taking behavior. Accusations of all forms of inappropriate test-taking behavior will be investigated and appropriate remediation/disciplinary actions taken in circumstances where the accused is responsible for conduct that does not remain above the appearance of impropriety. Cheating is grounds for dismissal or other sanctions.

## Online Exam Proctoring

UWS uses an exam proctoring service to maintain exam integrity for online students. Students taking courses online will be directed to take specific examinations through this service. A web cam and high-speed Internet connection is required. [www.proctoru.com](http://www.proctoru.com), Support (205) 870-8122.



## Privacy of Student Records

UWS protects the privacy of student academic records in accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA) and its amendments. For more information, see [Policy 1232 Student Record Privacy](#).

### Student Directory Information

UWS may be required by law to provide directory information in accordance with the provisions of the Family Educational Rights and Privacy Act (FERPA). Information pursuant to legally required disclosure will be limited to the extent required by law. The university shall make a good faith effort to notify individuals who have had FERPA-protected information disclosed under this requirement.

Directory information may include: student name, address, telephone number, email address, date and place of birth, photograph, dates of attendance, enrollment status, degrees and awards received, and most recent previous educational agency or institution attended by student. Any student who does not wish to disclose his/her information must notify the registrar in writing. The office of the registrar or student services can provide appropriate forms to opt out of specific information disclosures.

### Record Review

Under FERPA, students have the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if they disagree with the outcome of the hearing. Information on how to request a review of records or to initiate a hearing process is available in the office of the registrar.

### Transcript Requests

University of Western States provides official and unofficial transcripts upon receipt of a signed, written request to the office of the registrar. The [Transcript Request](#) form may be found on the university website or in the office of the registrar. Requests for official transcripts must be accompanied by payment in the form of check, cash, or charge in the amount of the current transcript fee (also posted on the website). Official transcripts bear the registrar's signature and UWS seal.

Requests for transcripts will be honored only when the student or graduate is in good financial standing with no indebtedness to the university. [Policy 1237 Transcripts](#)

### Applying for National Board and State Licensure Examinations

The office of the registrar certifies course/program completion to demonstrate eligibility to take national board and state licensure exams. Students should communicate with the registrar far in advance of posted deadlines in order to ensure that necessary materials and other requirements can be provided on time.

Information on national board exam or state licensing exam requirements/eligibility is available online:

#### Chiropractic

Federation of Chiropractic Licensing Boards: [www.fclb.org](http://www.fclb.org).

National Board of Chiropractic Examiners: [www.nbce.org](http://www.nbce.org).

#### Massage

Federation of State Massage Therapy Boards: [www.fsmtb.org](http://www.fsmtb.org).

Massage and Bodywork Licensing Exam: [www.fsmtb.org](http://www.fsmtb.org).

National Certification Board for Therapeutic Massage and Bodywork: [www.ncbtmb.org](http://www.ncbtmb.org).

# College of Chiropractic

The doctor of chiropractic (DC) degree program is offered through the college of chiropractic. The purpose of the DC program is to provide training for students to develop the knowledge, skills, values, and behaviors necessary to become primary care chiropractic physicians who apply best evidence, critical thinking, effective procedures, and professional integrity in the delivery of patient-centered care.

The DC program is a rigorous 12-quarter, first professional degree program. Graduates have demonstrated program competencies, all of which support the development of the knowledge, skills, critical thinking, and professionalism expected of competent, caring chiropractic physicians. Through demonstration of the program's competencies, the graduate chiropractic physician from the DC program is prepared to positively impact their patients, communities, and the chiropractic profession.

## Graduation Requirements - DC Program

The doctor of chiropractic degree is conferred upon the individual who has fulfilled the following program requirements:

- Successful completion, with a minimum cumulative GPA of 2.0, of all required coursework.
- Successful completion of all quantitative and qualitative clinic competency requirements.
- Successful completion of each clinical skills assessment (CSA) exam.
- Freedom from all indebtedness and other obligations to UWS.

The DC program must be completed within six calendar years of the date of matriculation, including leaves of absence and any other period of non-enrollment. Students who have transferred from another DC program must earn the final 25 percent of the total credits required for the DC program at UWS. [Policy 1220 Graduation Requirements DC Program](#)

## Admission to the DC Program

### Application Procedure

UWS admits new students into the DC program in the fall (October) and winter (January) terms. Prospective students are encouraged to begin the formal application process up to 12 months in advance of their anticipated entry date. It is not necessary for candidates to have completed all prerequisites prior to application. The admissions staff routinely processes applications from students who are still completing prerequisites. Please refer to the catalog section on conditional acceptance.

The application packet includes a list of the material that must be submitted for official consideration of an applicant's file. Applicants should carefully review the program's selection criteria to ensure they are making the best possible presentation of their qualifications. The [application](#) for admission is available on the UWS website.

### Prerequisites

The doctor of chiropractic (DC) program is a rigorous, first-professional doctoral degree program whose graduates are trained as primary care chiropractic physicians. Admission requirements are guided by the prerequisites established by the Council on Chiropractic Education (CCE). UWS admission requirements also reflect institutional expectations of candidates. Applicants are expected to have undergraduate preparation similar to that of other first professional health care professions. Applicants should also be aware that individual state licensing boards may have different educational requirements for licensure.

### Total Credits and GPA

All DC matriculates must have completed the equivalent of three academic years of undergraduate study (90 semester or 135 quarter hours) of appropriate pre-professional education courses at an institution or institutions accredited by an agency recognized by the Secretary of the U.S. Department of Education or an equivalent foreign agency. Matriculates must have grade point average of at least 3.0 on a 4.0 scale for these 90 hours.

The 90 hours must include a minimum of 24 semester hours in life and physical science courses. At least half of these courses must have a substantive laboratory component. The student's undergraduate preparation should also include a well-rounded general education program in the humanities and social sciences, and other coursework as indicated below.

Prerequisites	General Suggestions	Semester Hours	Quarter Hours
Life and Physical Sciences	UWS recommends a pre-medical foundation as the best preparation for the doctor of chiropractic curriculum. Such courses typically include a full-year sequence of biology, general chemistry, organic and/or biochemistry, and physics with related laboratory. Courses should be designed for pre-professional or science majors.	24	36
Life and Physical Sciences Labs	At least half of the required life and physical science coursework above must include a substantive laboratory component.		
Humanities and Social Sciences	Anthropology, art appreciation, comparative religions, English, economics, foreign language, geography, history, philosophy, political science, psychology, sociology, speech communication, women's studies, writing, etc.	66	99
Additional Courses	Courses that are in the student's area of interest		
<b>Total Credits Required</b>		<b>90</b>	<b>135</b>

- No grades below 2.00 on a 4.00 scale may be accepted.
- If more than one course is taken to fulfill the requirement, the course contents must be unduplicated.

### Life and Physical Sciences (24 semester hours)

Courses completed to fulfill entry requirements should be designed for pre-professional or science majors; courses designed for non-science majors are not acceptable. Survey courses are strongly discouraged.

In most cases, an applicant should complete a full-year sequence including laboratory experience in biology, general chemistry, organic chemistry, and physics. Individual courses must be completed with a minimum C grade. A "pass" grade will not normally be accepted in fulfillment of any science lecture. A pass grade is acceptable for the lab component.

#### Life Science

Life sciences include any of the branches of science that study the structural and functional organization of living organisms and their relationships to each other and the environment. Examples include: biology, anatomy, physiology, biomechanics, and zoology.

#### Physical Science

Physical sciences include any of the branches of science that study the nature and properties of energy and nonliving matter. Examples include: chemistry, physics, and statistics.

#### Humanities and Social Sciences

Students are expected to have a well-rounded distribution of humanities and social science coursework. There is no minimum credit requirement for this prerequisite area.

Humanities courses typically include art history, literature, music, philosophy, religious thought, foreign language, and performing arts. Social sciences typically include anthropology, economics, geography, history, political sciences, psychology, and sociology. Individual courses must be completed with a minimum C grade.

#### Transfer Credit

[Policy 2007 Transfer Credit](#) details the requirements for transfer credit. Applicants for transfer to UWS must be in good standing, or have been in good standing, in the program from which transfer credits are requested. Transfer applicants must meet the UWS admissions eligibility requirements in effect at the time the transfer is made. Transfer credits must have been earned at an institution accredited by an agency recognized by the United States Department of Education or its foreign equivalent. Non-traditional or non-institutionally-based coursework that is recommended by the American Council on Education's (ACE) College Credit Recommendation Service (CREDIT) may also be considered for transfer credit.

Transfer credit may only be awarded for courses with a grade of C or better. Grades such as pass and satisfactory may also be accepted when appropriate. Request for transfer credit should be made during the transfer application process and subsequent requests will not be considered beyond the third term of enrollment at UWS.

Courses used to meet specific UWS admission requirements are not also eligible for transfer credit. Courses to be transferred must be equivalent in content and credit hours to corresponding courses at UWS as determined on a course-by-course basis by the appropriate faculty, director or dean. Review of course descriptions for content and hours, course syllabi and faculty credentials are criteria that may be used in the evaluation of courses for transfer credit.

Students wishing to inquire about or to begin the transfer process should consult with a representative of the office of admissions. Applicants for transfer may begin their studies at UWS in any term - fall, winter, spring, or summer.

### **Transfers from Other Health Profession Schools**

UWS gives full consideration to all applicants for admission desiring to transfer from other health-professions programs. Transfer can ordinarily be accomplished with minimal difficulty. However, students who decide to transfer should do so as soon as possible, as any delay may create unnecessary complications. DC program transfer students must earn the final 25 percent of program credits at UWS.

### **Developing an Enrollment Plan for DC Transfer Students**

By carefully following their customized enrollment plan, students who transfer with one year or less of coursework completed at another chiropractic program may be able to complete the DC program at UWS in approximately the same length of time as they would have if they had not transferred. However, this depends upon the student's unique situation. Students who transfer with more than one year of coursework completed at another DC program may require additional time to meet all UWS graduation requirements due to variations in credit value, term length (semester/trimester/quarter differences), and placement of courses (e.g., some programs introduce adjusting courses later than UWS).

Transferring students should bear in mind that graduation requirements are set by both UWS and the Council on Chiropractic Education (CCE) and stipulate specific numbers of both credit and instructional hours. Students who transfer may have to complete additional instructional hours or credit hours, or may need to take some coursework from lower quarters, resulting in a mixed schedule for one or more terms. UWS requires that students successfully complete at least the final 25 percent of program credits at UWS to be eligible to earn the degree.

The dean of the college of chiropractic, in consultation with the faculty department chairs, will assess individual courses for transfer credit. The registrar maintains a copy of remaining course and credit hour graduation requirements for each transfer student, along with a specific enrollment plan for meeting those requirements.

### **Credit by Examination**

As stipulated by the Council on Chiropractic Education (CCE), UWS recognizes credits in the humanities and social sciences completed by examination. Testing programs include, but are not limited to, the College Level Examination Program (CLEP), institutional proficiency exams such as DANTES, NY Board of Regents College Examinations, or college challenge exams. For acceptance, courses and credit hours must be listed on a transcript from an institution with regional accreditation.

Credit by examination is generally not allowed for biology, chemistry, or physics courses completed to satisfy the minimum entry requirements in those areas.

### **Age of Course Credits**

Based upon the experience of previous entering students, UWS prefers that at least half of the biology and organic chemistry coursework be completed within five years of entry into the DC program. When age of coursework is an issue, consideration is given on an individual basis; job-related experiences in biology or organic chemistry may be assessed as a compensating factor.

### **Vocational Coursework**

UWS will accept up to 12 quarter credits of vocational coursework toward the minimum credit requirement.

### **Technical Standards**

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll, with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

## International Applicants

UWS encourages international students to apply for admission to the DC program. One-fifth or more of recent entering classes have come from outside the US, primarily from Canada. The diverse student body includes individuals from Hong Kong, India, Korea, Japan, Switzerland, and Iran. To be eligible for admission, international students must have completed coursework equivalent to that outlined in the section on prerequisites.

The office of admissions processes English language applications from Canadian students as efficiently as those from US students. Candidates whose education has been completed outside the United States or Canada must have their educational credentials evaluated by a NACES-affiliated international education evaluation service and the results forwarded directly to the office of admissions.

Prospective students for whom English is not their native language must also provide proof of adequate English language skills. UWS expects a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL iBT). A paper-based version of the test is available in areas where TOEFL iBT testing is not possible. TOEFL scores may be reported directly to UWS using institutional code number 4979.

Additional individual assessment is made during the admissions process regarding the applicant's demonstrated competence in reading, writing, and speaking English. If questions arise regarding competency in language skills, further testing may be required before entrance.

## International Students Studying in the U.S.

International students, including Canadian citizens, accepted into the DC program must meet U.S. Department of Homeland Security guidelines for studying in the U.S. prior to crossing the border to enroll at UWS. (For example, international students are required to present evidence of sufficient funds to finance at least the first year of education and living expenses.) Students should initiate this process with plenty of lead-time, preferably several months before leaving home. Questions about enrolling as an international student should be directed to the office of admissions.

## Financial Aid Awards - DC Program

All DC students are automatically considered for all types of aid, in the order listed below. Students are awarded the maximum amount of each type of aid, based on their eligibility as calculated by the U.S. Department of Education. These are the types of federal aid available:

### Federal Perkins Loans

Perkins loans are based on EFC, timely FAFSA application, and availability of funding.

- Amounts vary depending on funds available to award.
- UWS is the lender; the university's servicer, ECSI, will handle servicing and collections for this loan.
- No interest accrues and no payments are required while the student is enrolled at least halftime.
- Grace period: students have nine months after graduation or leaving school before repayment begins.
- Fees: 0.0 percent. Fixed interest rate: 5.0 percent.
- Perkins funding likely not available to DC students entering in winter 2016 or later.

### Federal Direct Loans (known as Stafford or Direct Loans)

- The U.S. Department of Education is the lender.
- Students are eligible to borrow up to the annual limit for every nine consecutive months of study at UWS.
- Annual Direct Loan limit: \$33,000.
- Aggregate (lifetime) Direct Loan limit: \$224,000.
- No payments are required while students are enrolled at least halftime.
- Grace period: Students have six months after graduation or leaving school before repayment begins.
- Fees: approximately 1 percent (deducted from each loan disbursement). Information on interest rates is available online at <https://studentaid.ed.gov/sa/types/loans/interest-rates> or from the financial aid office.

### Federal Direct Grad PLUS Loans

- Annual limit: Cost of Attendance minus other financial assistance, such as loans and scholarships.
- Credit check required; co-signer (endorser) may be required in some cases.
- The U.S. Department of Education is the lender. The DOE will assign a servicer.
- Fees: approximately 4.3 percent (deducted from each loan disbursement). Information on interest rates is available online at <https://studentaid.ed.gov/sa/types/loans/interest-rates> or from the financial aid office.

### Federal Work Study

- Student Employment is available on campus in a number of departments. Contact the financial aid office for more information.

## Other Non-Federal Sources of Funding

Admitted students in all programs may be eligible for non-federal sources of funding. Please refer to the catalog section on Tuition and Financial Aid Overview for information on non-federal sources of funding.

## Satisfactory Academic Progress for Financial Aid Eligibility (SAP) - DC Program

Federal regulations require all students receiving federal student aid to make satisfactory academic progress (SAP) toward a degree or certificate in order to retain eligibility for financial aid. Failure to maintain SAP, including minimum cumulative GPA and adequate progress toward degree completion, will result in the disqualification from federal student aid programs at UWS. Please refer to [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

## Financial Aid for International Students

University of Western States offers a US \$500/quarter grant to all international students enrolling full-time in the Doctor of Chiropractic program. To remain eligible, students must maintain a 2.5 GPA in the DC program. This grant is available for the duration of DC program enrollment.

## Canadian Student Aid

You are eligible to apply for aid from Canada while attending University of Western States. You will need to contact your province to identify the appropriate application to qualify for federal and/or provincial financial aid (<http://www.canlearn.ca/eng/common/help/contact/provincial.shtml>). Canadian students apply each year by completing an application online through the [student financial assistance web site of the home province or territory](#). Application forms should be submitted by March 1<sup>st</sup> for priority processing. In addition, some Canadian students elect to access a student line of credit from a Canadian bank. Some lending institutions offer loan funding specifically for chiropractic study.

## Other Countries

Your home country may have financial aid available for study at UWS. Usually this support requires that you return home after your education is complete. Contact the cultural section of your embassy or your ministry of education for more information, since there are many awards which require you to be nominated by your government. One of the best sources of financial aid to study in the US may be organizations in your own country. These may be private organizations in your home country that provide support for study in the US. Businesses, foundations, and religious groups may also have international study funds available.

## Professional Responsibilities of Students

Chiropractic is a licensed profession in all 50 states and the Canadian provinces. In Oregon, as in most other states, when a profession is licensed, only those individuals who have a valid license, or are operating under the direct supervision of a licensed UWS faculty member, are allowed to practice. An individual is likewise forbidden to make it appear that she or he is licensed, if she or he is not in fact licensed, or to mislead the public in any way regarding the issue of licensure or competence to practice the licensed profession.

Students need to be acutely aware of this legal boundary and behave accordingly, both on campus and off. It is illegal for students to diagnose and/or engage in any form of treatment of individuals unless they are being supervised under the authority of the university or a duly designated agent of the university. This usually means that evaluation and care are being pursued in university facilities and/or under the direct supervision of an Oregon-licensed doctor of chiropractic who is a faculty member at UWS.

## Chiropractic Licensure

The doctor of chiropractic program is designed to offer students chiropractic education sufficient to qualify for licensure in all 50 states and in foreign jurisdictions. UWS students regularly score among the highest on national board examinations, state licensure examinations, and Canadian board examinations. Graduates of UWS practice successfully across the country and internationally. Licensure regulations vary from one jurisdiction to another and are subject to change. Students should contact individual licensing boards and consult the Federation of Chiropractic Licensing Boards (FCLB) [website](#) for updated information regarding licensure requirements in each state.

Students applying to the chiropractic degree program are responsible for contacting the chiropractic examining boards for the states or provinces in which they are interested in practicing to become aware of those states' or provincial licensure requirements, particularly as they pertain to pre-chiropractic educational requirements.

## The National Board of Chiropractic Examiners

The National Board of Chiropractic Examiners (NBCE) is recognized throughout the United States. Its stated purpose is to evaluate the entry-level competencies of applicants for chiropractic licensure. DC program graduates must pass NBCE Parts I, II, III, and IV to become eligible to take chiropractic licensing exams in most states. UWS does not require students to take the national board examinations. However, failure to do so will make a student ineligible for licensure in most states. National Board scores cannot be used to replace grades earned in courses at UWS. Additional details regarding the National



Board examinations are available in the office of the registrar, the university library, or directly from the [National Board of Chiropractic Examiners](#) in Greeley, Colorado. [UWS student performance](#) on NBCE exams is available on the university website.

## **Canadian Licensure**

Canada's Council on Chiropractic Education (CCE-Canada) has chiropractic program admission prerequisites slightly different from those of CCE-USA. Canada requires three full years in a university program or at an institution or institutions recognized at the university level by a provincial Ministry of Education. Further, each province has the authority to set its own requirements for licensure, which are not necessarily linked to CCE-Canada's prerequisites. It is important that Canadian students entering the UWS DC program contact the chiropractic examining boards for the Canadian provinces in which they are interested in practicing, to become aware of each province's licensure requirements.

## **Competencies and Expected Learning Outcomes - DC Program**

The University of Western States doctor of chiropractic program prepares its graduates to practice as competent, caring, primary care chiropractic physicians with the following competencies:

1. Perform an initial assessment and diagnosis.
2. Create and execute an appropriate case management/treatment/intervention plan.
3. Promote health, wellness, safety, and disease prevention.
4. Communicate effectively with patients, doctors of chiropractic, and other health care professionals, regulatory agencies, third-party payers, and others as appropriate.
5. Produce and maintain accurate patient records and documentation.
6. Be proficient in neuromusculoskeletal evaluation, treatment and management.
7. Access and use health-related information.
8. Demonstrate critical thinking and decision-making skills, and sound clinical reasoning and judgment.
9. Understand and practice the ethical conduct and legal responsibilities of a health care provider.
10. Critically appraise and apply scientific literature and other information resources to provide effective patient care.
11. Seek new knowledge in a manner that promotes intellectual and professional development.
12. Apply successful business practices including business planning, management, billing, and quality assurance.
13. Appreciate the history of chiropractic, the role of integrative care and that of complementary and alternative medicine.

## Curriculum Sequence - DC Program

The three-letter abbreviation that begins each course designation indicates its academic area:

<b>BSC</b>	Basic Sciences	<b>CLI</b>	Clinical Internship
<b>CHR</b>	Chiropractic Sciences	<b>CSA</b>	Clinical Skills Assessment
<b>CSC</b>	Clinical Sciences	<b>ELE</b>	Electives
<b>CED</b>	Clinical Education		

Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
1	BSC 5102	Spinal Anatomy	1	1	0	22	1.5	G
1	BSC 5103	Gross Anatomy I	4	6	0	110	7	G
1	BSC 5113	Biochemistry I	4	1	0	55	4.5	G
1	BSC 5116	Cell Biology	3	1	0	44	3.5	G
1	CHR 5121	Philosophy and Principles of Chiropractic I	2	0	0	22	2	P/F
1	CHR 5125	Biomechanics/Palpation I Lecture	1	0	0	11	1	G
1	CHR 5136	Biomechanics/Palpation I Lab	0	3	0	33	1.5	P/F
1	CED 5142	Clinical Topics I	1	0	0	11	1	P/F
1	CSC 5182	Radiographic Anatomy I	1.5	1.5	0	33	2.25	G
<b>Q1 Totals</b>			<b>17.5</b>	<b>13.5</b>	<b>0</b>	<b>341</b>	<b>24.25</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
2	BSC 5203	Gross Anatomy II	4	3	0	77	5.5	G
2	BSC 5214	Biochemistry II	4	1	0	55	4.5	G
2	BSC 5217	Histology	4	2	0	66	5	G
2	CHR 5222	Philosophy and Principles of Chiropractic II	1	0	0	11	1	P/F
2	CHR 5226	Biomechanics/Palpation II Lecture	2	0	0	22	2	G
2	CHR 5231	Adjustive Psychomotor Skills	0	2	0	22	1	P/F
2	CHR 5234	Biomechanics/Palpation II Lab	0	4	0	44	2	P/F
2	CSC 5244	Information Mastery	1	0	0	11	1	G
2	CSC 5283	Radiographic Anatomy II	1	1	0	22	1.5	G
<b>Q2 Totals</b>			<b>17</b>	<b>13</b>	<b>0</b>	<b>330</b>	<b>23.5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
3	BSC 5302	Neuroanatomy	6	2	0	88	7	G
3	BSC 5304	Gross Anatomy III	4	3	0	77	5.5	G
3	BSC 5309	Physiology I	4	2	0	66	5	G
3	BSC 5314	Human Development	3	0	0	33	3	G
3	CHR 5321	Adjustive Technique I Lecture	2	0	0	22	2	G
3	CHR 5323	Philosophy and Principles of Chiropractic III	1	0	0	11	1	P/F
3	CHR 5332	Adjustive Technique I Lab	0	4	0	44	2	P/F
<b>Q3 Totals</b>			<b>20</b>	<b>11</b>	<b>0</b>	<b>341</b>	<b>25.5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
4	BSC 6103	Neurophysiology	5	0	0	55	5	G
4	BSC 6109	Physiology II	5	0	0	55	5	G
4	BSC 6112	Microbiology, Immunology and Public Health	5	1	0	66	5.5	G
4	BSC 6117	General Pathology I	6	0	0	66	6	G
4	CHR 6124	Soft Tissue Therapies/Rehabilitation I	1	2	0	33	2	P/F
4	CHR 6122	Adjustive Technique II Lecture	1	0	0	11	1	G
4	CHR 6133	Adjustive Technique II Lab	0	3	0	33	1.5	P/F
4	CED 6144	Clinical Topics II	1	1	0	22	1.5	P/F
4	CSC 6178	Evidence-informed Practice I	2	0	0	22	2	G
4	CSC 6184	Radiographic Anatomy III	1	1	0	22	1.5	G
<b>Q4 Totals</b>			<b>27</b>	<b>8</b>	<b>0</b>	<b>385</b>	<b>31</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
5	BSC 6203	Nutrition	4	0	0	44	4	G
5	BSC 6207	Genetics	4	0	0	44	4	G
5	BSC 6213	Clinical Microbiology and Public Health	5	2	0	77	6	G
5	BSC 6218	General Pathology II	4	0	0	44	4	G
5	CHR 6223	Adjustive Technique III Lecture	1	0	0	11	1	G

5	CHR 6224	Philosophy and Principles of Chiropractic IV	1	0	0	11	1	P/F
5	CHR 6227	Biomechanics/Palpation III Lecture	2	0	0	22	2	G
5	CHR 6234	Adjustive Technique III Lab	0	3	0	33	1.5	P/F
5	CED 6262	Physical Diagnosis I Lecture	4	0	0	44	4	G
5	CED 6263	Physical Diagnosis I Lab	0	2	0	22	1	P/F
5	CSC 6270	Patient/Practice Management I	1	1	0	22	1.5	G
5	CSC 6275	Dermatology and Infectious Disease	2	0	0	22	2	G
5	CSC 6277	Evidence-informed Practice II	2	0	0	22	2	G
<b>Q5 Totals</b>			<b>30</b>	<b>8</b>	<b>0</b>	<b>418</b>	<b>34</b>	
<b>Qtr.</b>	<b>Course #</b>	<b>Course Name</b>	<b>Lecture</b>	<b>Lab</b>	<b>Clinical</b>	<b>Clock</b>	<b>Credit</b>	<b>Grade</b>
6	CHR 6322	NMS Diagnosis and Treatment I Lecture	6	0	0	66	6	G
6	CHR 6325	NMS Diagnosis and Treatment I Lab	0	2	0	22	1	P/F
6	CHR 6324	Adjustive Technique IV Lecture	1	0	0	11	1	G
6	CHR 6329	Biomechanics/Palpation IV Lecture	2	0	0	22	2	G
6	CHR 6331	Biomechanics/Palpation IV Lab	0	2	0	22	1	P/F
6	CHR 6336	Adjustive Technique IV Lab	0	5	0	55	2.5	P/F
6	CHR 6337	Adjustive Technique V Introduction	0	3	0	33	1.5	P/F
6	CED 6343	Clinical Topics III	1	0	0	11	1	P/F
6	CED 6363	Physical Diagnosis II Lecture	4	0	0	44	4	G
6	CED 6364	Physical Diagnosis II Lab	0	2	0	22	1	P/F
6	CSC 6367	Clinical Lab	3	2	0	55	4	G
6	CSC 6386	Radiographic Technique I	4	1	0	55	4.5	G
<b>Q6 Totals</b>			<b>21</b>	<b>17</b>	<b>0</b>	<b>418</b>	<b>29.5</b>	
<b>Qtr.</b>	<b>Course #</b>	<b>Course Name</b>	<b>Lecture</b>	<b>Lab</b>	<b>Clinical</b>	<b>Clock</b>	<b>Credit</b>	<b>Grade</b>
7	CHR 7123	NMS Diagnosis and Treatment II Lecture	3	0	0	33	3	G
7	CHR 7126	NMS Diagnosis and Treatment II Lab	0	1	0	11	0.5	P/F
7	CHR 7127	Taping and Splinting I	0	1	0	11	0.5	P/F
7	CHR 7137	Adjustive Technique V Advanced	0	2	0	22	1	P/F
7	CHR 7138	Adjustive Technique VI	0	3	0	33	1.5	P/F
7	CHR 7162	Chiropractic Physiological Therapeutics I	3	2	0	55	4	G
7	CED 7157	Clinic Phase I	2	2	0	44	3	P/F
7	CLI 7160	Clinical Internship I	1	2	0	33	2	P/F
7	CED 7163	Cardiorespiratory Diagnosis and Treatment	3	0	0	33	3	G
7	CSC 7167	Clinical Pathology	3	0	0	33	3	G
7	CSC 7172	Patient/Practice Management II	1	0	0	11	1	G
7	CSC 7175	Emergency Care	1	0	0	11	1	P/F
7	CSC 7187	Radiographic Technique II	1	1	0	22	1.5	G
7	CSC 7192	Bone Pathology I	2	1	0	33	2.5	G
<b>Q7 Totals</b>			<b>21</b>	<b>15</b>	<b>2</b>	<b>396</b>	<b>28.5</b>	
<b>Qtr.</b>	<b>Course #</b>	<b>Course Name</b>	<b>Lecture</b>	<b>Lab</b>	<b>Clinical</b>	<b>Clock</b>	<b>Credit</b>	<b>Grade</b>
8	CHR 7224	NMS Diagnosis and Treatment III Lecture	3	0	0	33	3	G
8	CHR 7227	Soft Tissue Therapies/Rehabilitation II	0	3	0	33	1.5	P/F
8	CHR 7228	NMS Diagnosis and Treatment III Lab	0	1	0	11	0.5	P/F
8	CHR 7229	Taping and Splinting II	0	1	0	11	0.5	P/F
8	CHR 7265	Chiropractic Physiological Therapeutics II	3	2	0	55	4	G
8	CLI 7208	Clinical Internship II	0	0	6	66	2	P/F
8	CED 7209	Clinic Phase II	2	2	0	44	3	P/F
8	CED 7264	Gastroenterology Diagnosis and Treatment	3	0	0	33	3	G
8	CSC 7271	Clinical Nutrition and Botanicals I	4	0	0	44	4	G
8	CSC 7288	Radiographic Technique III	1	1	0	22	1.5	G
8	CSC 7293	Bone Pathology II	3	1	0	44	3.5	G
<b>Q8 Totals</b>			<b>19</b>	<b>11</b>	<b>6</b>	<b>396</b>	<b>26.5</b>	
<b>Qtr.</b>	<b>Course #</b>	<b>Course Name</b>	<b>Lecture</b>	<b>Lab</b>	<b>Clinical</b>	<b>Clock</b>	<b>Credit</b>	<b>Grade</b>
9	CHR 7327	Adjustive Technique VII Lecture	1	0	0	11	1	G
9	CHR 7338	Adjustive Technique VII Lab	0	2	0	22	1	P/F
9	CED 7304	Clinic Phase III	2	2	0	44	3	P/F

9	CLI 7305	Clinical Internship III	0	0	10	110	3.25	P/F
9	CSA 7313	Written Clinical Skills Assessment	0	0	0	0	0	P/F
9	CSA 7314	Practical Clinical Assessment	0	0	0	0	0	P/F
9	CSC 7324	Clinical Neurology	5	0	0	55	5	G
9	CSC 7365	Genitourinary Survey	5	0	0	55	5	G
9	CSC 7366	Jurisprudence and Ethics	2	0	0	22	2	G
9	CSC 7372	Clinical Nutrition and Botanicals II	1	0	0	11	1	G
9	CSC 7375	Introduction to Pharmacology	3	0	0	33	3	G
9	CSC 7376	Patient/Practice Management III	1	0	0	11	1	G
9	CSC 7394	Bone Pathology III	1	1	0	22	1.5	G
<b>Q9 Totals</b>			<b>21</b>	<b>5</b>	<b>10</b>	<b>396</b>	<b>26.75</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
10/11	CHR 8126	Philosophy and Principles of Chiropractic VI	1	0	0	11	1	P/F
10/11	CHR 8139	Adjustive Technique VIII	0	2	0	22	1	P/F
10	CLI 8157	Clinical Internship IV	0	0	25	275	8.25	P/F
10/11	CSA 8165	Radiology Clinical Skills Assessment	0	0	0	0	0	P/F
10/11	CSC 8165	Correlative and Differential Diagnosis	4	0	0	44	4	G
10/11	CSC 8167	Minor Surgery/Proctology	2.5	0	0	27.5	2.5	G
10/11	CSC 8170	Patient/Practice Management IV	2	0	0	22	2	G
10/11	CSC 8173	Obstetrics	2	0	0	22	2	G
10/11	CSC 8180	Evidence-informed Practice III	1	0	0	11	1	P/F
10/11	CSC 8199	Soft Tissue Interpretation	1	1	0	22	1.5	G
<b>Q10/11 Totals</b>			<b>13.5</b>	<b>3</b>	<b>25</b>	<b>456.5</b>	<b>23.25</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
10/11	CHR 8225	Philosophy and Principles of Chiropractic V	2	0	0	22	2	P/F
10/11	CHR 8230	Adjustive Technique IX	0	2	0	22	1	P/F
10/11	CHR 8240	Adjustive Technique X	0	2	0	22	1	P/F
11	CLI 8258	Clinical Internship V	0	0	25	275	8.25	P/F
10/11	CSC 8266	Clinical Pediatrics	3	0	0	33	3	G
10/11	CSC 8267	Clinical Geriatrics	2	0	0	22	2	G
10/11	CSC 8268	Clinical Psychology	3	0	0	33	3	G
10/11	CSC 8270	Patient/Practice Management V	1	0	0	11	1	G
10/11	CSC 8280	Evidence-informed Practice IV	1	0	0	11	1	P/F
10/11	CSC 8295	Bone Pathology IV	1	1	0	22	1.5	G
<b>Q10/11 Totals</b>			<b>13</b>	<b>5</b>	<b>25</b>	<b>473</b>	<b>23.75</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
12	CLI 8361	Clinical Internship VI	0	0	27	297	9	P/F
<b>Q12 Totals</b>			<b>0</b>	<b>0</b>	<b>27</b>	<b>297</b>	<b>9</b>	
<b>Curriculum Totals</b>			<b>220</b>	<b>109.5</b>	<b>93</b>	<b>4647.5</b>	<b>305.5</b>	
Qtr.	Course #	Elective	Lecture	Lab	Clinic	Clock	Credit	Grade
10/11	CSC 8178	Minor Surgery/Proctology Lab Elective	0	1	0	11.0	0.5	P/NP

## Chiropractic Techniques - DC Program

The University of Western States is committed to quality, safety, and effectiveness in the care of patients. The university understands and appreciates the broad diversity of adjustive techniques that may have value for patients, and carefully considers which techniques will be taught within the core curriculum based on the available time to teach techniques, the best available evidence for approaches, and the consensus opinion of the faculty.

## Electives - DC Program

The curriculum of the DC program is tightly structured and contains the academic material and clinical experiences necessary to meet the standards of licensure boards and the demands of the profession. Electives are occasionally offered in addition to the prescribed course of study, but are not a requirement of graduation. They may be offered at special times, including during term breaks. Tuition for elective courses is not included in base tuition costs; enrolling in elective courses will require paying additional tuition.

## Course Descriptions - DC Program

The numbers in parentheses following each course description are the hours that each class meets per week during a typical 11-week quarter (lecture + lab hours).

### Basic Sciences

#### **BSC 5102 Spinal Anatomy (1.5 credits)**

This course is an introduction to the structure and function of the human vertebral column. Topics include study of the osteology, arthrology, syndesmology and the neurovascular supply of the spine. The occipital, cervical, thoracic, lumbar, and sacral regions of the spine are studied in the laboratory. The nomenclature of a limited number of clinical problems of the spine is introduced in the laboratory through the study of human vertebral columns. The laboratory also includes a number of unique cadaveric prosections that offer an opportunity to study the anatomy of the different vertebral regions. (1+1)

#### **BSC 5103 Gross Anatomy I (7 credits)**

This is the first of three sequential courses in human gross anatomy (see BSC 5203 and BSC 5304). In this course, students study the normal regional anatomy of the back, upper extremity and lower extremity. Particular attention is paid to the anatomical relationship of bones, joints, muscles, blood vessels, and peripheral nerves in these regions. The anatomical and functional aspects of the autonomic nervous system are also introduced. Lectures emphasize the concepts, terminology, and information needed to appreciate the normal organization of the region under study. Lectures also prepare the student for laboratory dissection of the human cadaver. The dissection labs provide a unique opportunity to dissect, visualize, and explore the anatomical structures of each region and to witness the individual variations that exist from person to person. (4+6)

#### **BSC 5113 Biochemistry I (4.5 credits)**

Biochemistry is taught as a two-quarter sequence with BSC 5214, and emphasizes the structure, function, and metabolism of biomolecules. In each course, students will develop connections between biochemistry and nutrition, physiology, and clinical diagnosis. In biochemistry I the student will identify and explain the structure and general function of the four biomolecules; amino acids, nucleotides, carbohydrates, and lipids. To explain the biological context of structure, acid-base chemistry and the chemical properties of water and lipids are reviewed. To understand how protein structure dictates function, students identify chemical and structural aspects of a protein that support the general physiology of proteins as well as enzyme catalysis. Nucleic acids are studied in the context of their role in replication, transcription, and translation. Carbohydrates and lipids are described in the context of storage and subcellular structure. This course has an accompanying recitation forum that parallels the lecture material with emphasis on clinical correlates. (4+1)

#### **BSC 5116 Cell Biology (3.5 credits)**

This course provides the student with a basic understanding of normal cellular structure and function. The course is presented in modules framed around ten clinical correlations. Each clinical disorder is presented at the beginning of a module and is then followed by a discussion of the relevant general cellular principles. The module is completed by discussing the specific cell biological basis for the disorder. Four modules are framed around the cell membrane, and other modules deal with endoplasmic reticulum, Golgi apparatus, lysosome, mitochondrion, cytoskeleton, and nucleus. The laboratory sessions consist of an introduction to light microscopy, basic cells and structure, and electron micrographs of the lecture material. (3+1)

#### **BSC 5203 Gross Anatomy II (5.5 credits)**

This course is the second in a series of three courses (with BSC 5103 and BSC 5304) that, together with the course in spinal anatomy (BSC 5102), examines in detail the gross anatomy of the human body. This course highlights the regional anatomy of the head and anterolateral neck. In lectures and dissection labs students learn the detailed anatomy of the muscles, nerves, bones, joints, vessels, organs of special sense, and visceral structures of the region. In lab all students will dissect human cadavers and study the anatomical variation in structures associated with the deep and superficial neck and head, including the cranial vault, oral and nasal cavities, pharynx, and larynx. The structural and functional features of the cranial nerves, the organization of the autonomic nervous system, and the innervation of the spine and paraspinal tissue are presented. (4+3)

#### **BSC 5214 Biochemistry II (4.5 credits)**

This course is the second of a two-course sequence (with BSC 5113) in biochemistry. The focus of biochemistry II is intermediary metabolism. For each topic, the student will identify the purpose of each enzyme in a metabolic pathway and relate the enzyme function to regulation and metabolic deficiency. Topics in carbohydrate metabolism include glucose uptake from blood to cell, glycolysis, aerobic and anaerobic metabolism, the pentose shunt, gluconeogenesis, and glycogen metabolism. Lipid metabolism topics include the mobilization and oxidation of fatty acids, ketone body formation, fatty acid synthesis, triglyceride synthesis, phospholipid synthesis, cholesterol synthesis, and lipid transport. For amino acid metabolism, topics include urea synthesis, catabolism of amino acid carbon skeletons, and synthesis of non-essential amino acids. Topics in nucleotide metabolism are focused on the biosynthesis of purines, pyrimidines, and deoxynucleotides, as well as purine catabolism and pathogenesis of gout. As a final topic, vitamins are discussed in terms of general function,

coenzyme forms, and deficiency. This course has an accompanying recitation forum that parallels the lecture material with emphasis on clinical correlates. (4+1)

**BSC 5217 Histology (5 credits)**

In this course students will learn the microscopic anatomy of the following organ systems: integumentary, musculoskeletal, vascular, nervous, digestive, respiratory, lymphatic, urinary, and reproductive. Intervertebral and synovial joint histology is covered. Students learn the structure, function, and location of each of the four basic tissue types (epithelium, connective tissue, muscle, nervous tissue) and how they each contribute to organ structure and function. Microscopic morphology, composition, organization, and resultant function are emphasized. In the associated labs students learn proper technique for using a microscope and thoroughly examine commercially prepared histological specimens from all relevant tissues and organs. (4+2)

**BSC 5302 Neuroanatomy (7 credits)**

This course describes the detailed anatomy and functional features of macro- and micro-anatomical structures in the brain and spinal cord. Prerequisite information to this course material is presented in the histology and gross anatomy courses. In this course, students first learn the basic structural and organizational features of the spinal cord and brain. Students then consider the interactions of spinal cord and brain structures that comprise major sensory and motor functional pathway systems. In lecture and in lab, course material includes discussion of neurological deficits associated with disturbances of brain and spinal cord structures. In the lab, students study whole and dissected human brain specimens and stained sections of the human brainstem and spinal cord that display normal and diseased structure. (6+2)

**BSC 5304 Gross Anatomy III (5.5 credits)**

This course completes the lecture and laboratory components of the gross anatomy series of courses (with BSC 5103 and BSC 5203). In this course, students study the normal regional anatomy of the thorax, abdomen, pelvis, and perineum, including discussions of the heart, lungs, digestive, urinary, endocrine, and reproductive systems. Particular attention is paid to the terminology, position, and relationship of these organs to each other in the body cavity, as well as their blood supply and innervation by the autonomic nervous system. The anatomical and clinical relationships of the bones, joints, muscles, blood vessels, and peripheral nerves of the body wall are also discussed. Each organ system includes special emphasis on the anatomy of referred pain, an important consideration in the field of chiropractic. The laboratory portion of this course continues the unique opportunity to dissect, visualize, and explore each of the four regions under study. (4+3)

**BSC 5309 Physiology I (5 credits)**

General physiology is taught as a two-course sequence (with BSC 6109). This course addresses cardiovascular, respiratory, and renal physiology. Approximately 60% of the course consists of cardiovascular concepts including blood, hemodynamics, cardiac cycle, electrocardiography, blood pressure, central nervous control, peripheral vasculature, systemic circulation, capillary dynamics, and the lymphatic system. Approximately 20% of the course consists of respiratory concepts including ventilation, gas exchange, gas transport, and the control of respiration. The remaining 20% of the course covers renal concepts including glomerular filtration, tubular exchange mechanics, urine formation, body fluid balance, and micturition. Relevant pathological concepts are presented whenever possible. The weekly laboratory sessions consist of observations and experiments on humans; some activities include the use of digital physiological recording equipment to explore the cardiac cycle and the electrocardiogram. Additionally, the lab portion of the course serves as an introduction to the clinical skills of heart auscultation and arterial blood pressure measurement. (4+2)

**BSC 5314 Human Development (3 credits)**

This lecture course explores the complex phenomena of human development. Emphasis is on the embryonic period (weeks 1-8) of development. The processes of gametogenesis, fertilization, implantation, embryogenesis, placentation, segmentation, and organogenesis are all discussed. The course provides an understanding of the development of adult body structures in relation to each other. Some general topics of interest include mechanisms for twin formation, heart and limb formation, gender determination, and influences affecting cellular differentiation. Detailed terminology regarding developmental processes and the timing of developmental stages are introduced. Discussions include congenital abnormalities and the factors that disrupt normal development. (3+0)

**BSC 6103 Neurophysiology (5 credits)**

This companion course to BSC 5302 is a limited scope neuroscience course in three parts (modules). The first module contains a cellular and molecular neuroscience component, which includes coverage of the cellular components of the nervous system, synaptic transmission, molecular signaling within neurons, neurotransmitters and receptors, cellular electrophysiology, neuronal damage and regeneration, excitotoxicity, and synaptic plasticity processes, among others. Topical areas in cellular/molecular neuroscience are presented that complement presentations of systems neuroscience (module 2). The second module covers cognitive neuroscience topics including a systems neuroscience component. A select set of clinically relevant cognitive neuroscience topics are covered, including distributed functions of neural/cognitive networks underlying perception, sleep, attention, emotion, memory, and global brain states. The third module is dedicated to the neurophysiology of pain, including but not limited to: nociceptors, transduction of nociceptive signals, nociceptive pathways, and mechanisms of pain modulation. Throughout the course relevant clinical conditions are presented. (5+0)



**BSC 6109 Physiology II (5 credits)**

This course is the second of the two-quarter sequence (with BSC 5309) in general physiology. The focus of physiology II is the endocrine and gastrointestinal systems, as well as hypothalamic regulation of metabolism and temperature. For each topic, the student will identify the purpose of each gland, organ, hormone, or neurologic stimulus and analyze the function in terms of regulation and deficiency or excess. Hormones from the pituitary, thyroid, adrenals, pancreas, and gonads, as well as those associated with calcium regulation, are studied. For each endocrine gland the following topics are dissected: review of pertinent anatomy and histology, general chemical structure of hormones, hormone biosynthesis, actions of hormones, mechanism of action at target sites, and regulation of secretion. Gastrointestinal physiology topics include neural and hormonal regulation in the gut, behavior of smooth muscle, motility, secretions, digestion, and absorption of nutrients. Metabolic physiology topics include measurement of metabolic rate, factors affecting basal metabolic rate, contributions to calorie expenditure, and regulatory mechanisms associated with food intake. Temperature regulation topics include hypothalamic control of heat gain and heat loss mechanisms. (5+0)

**BSC 6112 Microbiology, Immunology, and Public Health (5.5 credits)**

This course is an introduction to the basic principles of microbiology and public health. Structure, metabolism, genetics, and antibiotic therapy of prokaryotic microorganisms are covered with emphasis on gram positive and enteric bacteria. Students develop a practical understanding of the importance of pathogenic bacteria in clinical practice and public health. Lectures cover topics such as health concerns for travelers, meningitis, streptococcal sore throat, pneumonia, anaerobic infections, diphtheria, tetanus, and enteric infections. Laboratory exercises include cultivation and diagnostic procedures using live bacteria. There is a comprehensive introduction to the principles of immunology, including development of the immune system, immune injury, and the use of immunization in prevention of infectious diseases. The public health component of the course addresses the basic principles of public health, disease prevention, epidemiology, and international health. Students are asked to find and assess literature concerning public health issues. This exercise reinforces the principles of evidence based practice. The role of the Chiropractic Health Section of the American Public Health Association and its significance to the chiropractic profession is discussed. (5+1)

**BSC 6117 General Pathology I (6 credits)**

This course is the first in a two-part series (with BSC 6218) to provide the student with an understanding of the key concepts and major themes of pathology (the study of disease), integrate these concepts with prior knowledge of anatomy and physiology, and prepare the student for the clinical phase of the chiropractic curriculum. The emphasis in this course is on the characteristics of cellular, tissue, and organ responses in disease. Topics of study include the gross and histological features of cell injury and necrosis, a review of metabolic, environmental, and degenerative conditions leading to tissue deposits of various substances, and the cellular and chemical features of acute and chronic inflammation. Characteristics of tissue regeneration and wound healing are reviewed. The etiology, pathogenesis, morphology, and functional aspects of benign and malignant neoplasms are examined. Disturbances of circulation including edema, hemorrhage, thrombosis, embolization, and infarction are described. Genetic disorders including chromosomal abnormalities and inborn errors of metabolism are explored. Disorders of the immune system are surveyed including hypersensitivity reactions, autoimmune disease and immunological deficiencies. A review of pathologies related to environmental toxicity and nutritional diseases is included. Diseases of bone, joints, and muscle and major conditions affecting the organ systems are also reviewed. Topics include osteoporosis and osteomalacia, osteomyelitis and skeletal neoplasms. Structural and clinical features of arthritis (including osteo- and rheumatoid types) and diseases of muscle including the dystrophies and myasthenia gravis are described. (6+0)

**BSC 6203 Nutrition (4 credits)**

In this course the student applies basic biochemical and physiological knowledge to understand the principles of nutritional science and to develop an appreciation of nutrition's role in preventive and therapeutic health care. In reviewing the health issues surrounding each macronutrient and micronutrient, the student learns to assess dietary and other risk factors for diseases that may be preventable through nutritional intervention. Selected clinical applications in therapeutic nutrition are used to illustrate important concepts and to introduce the student to the practice of clinical nutrition. Term projects include practical experience in diet assessment and practice in locating and evaluating nutrition research from an evidence-based perspective. (4+0)

**BSC 6207 Genetics (4 credits)**

Genetics is rapidly emerging as the interdisciplinary link between all fields in the life sciences. This course represents a survey of this huge subject with an eye toward linking basic biology and pathology to clinical chiropractic. Core topics include chromosomes, the karyotype, meiosis, mutation, gene expression, genetic disease, heredity (autosomal, X-linked, and multifactorial), populations, and genetic counseling. All subject matter is placed in the context of human disease. Students learn to take a genetic history as well as construct and evaluate family pedigrees. The course includes substantial coverage of disorders commonly seen by chiropractors with an emphasis on major social questions surrounding recent discoveries. (4+0)

**BSC 6213 Clinical Microbiology and Public Health (6 credits)**

This course is a comprehensive review of pathogenic bacteria, fungi, parasites, and viruses. Emphasis is on epidemiology, pathogenesis, diagnosis, prevention, and treatment. Bacterial diseases include pertussis, sexually transmitted infections

(STIs), Lyme disease, tuberculosis, leprosy, typhus, and legionnaire's disease. Medical mycology is explored with emphasis on fungal diseases such as dermatophytoses. The section on parasites includes amoebae, malaria, round worms, and tapeworms. The final section of the course is a comprehensive review of viral diseases, including smallpox, herpes, polio, influenza, measles, mumps, rubella, hepatitis, rabies, and HIV. Risks to travelers as well as preventive measures are discussed. The laboratory includes bacteriological staining exercises, examination of parasites, and cultivation of fungi. Important public health aspects, including immunizations, are discussed whenever relevant. (5+2)

#### **BSC 6218 General Pathology II (4 credits)**

This course, a continuation of BSC 6117, emphasizes diseases of the organ systems. Major diseases of the cardiovascular and hematopoietic organs, such as arteriosclerosis, aneurysms, ischemic heart disease, anemia, lymphoma, leukemia, and multiple myeloma, are discussed. Diseases of the liver, gall bladder, and pancreas are discussed along with pathological conditions of the gastrointestinal tract, including ulcers, neoplasms, and inflammatory conditions. A number of diseases affecting the nervous system including senile dementia, Parkinson's disease, multiple sclerosis, stroke, and peripheral neuropathies are explored. Conditions affecting the respiratory system, such as bronchitis, emphysema, and asthma are discussed. A variety of diseases involving the kidney and urinary tract as well as a host of pathologies of both male and female reproductive structures are presented. Endocrine diseases including pituitary, thyroid, parathyroid, adrenal, and pancreatic diseases are also reviewed. Overall, there is an increasing emphasis on developing an attitude and frame of mind conducive to success in the clinical phase of the chiropractic curriculum. (4+0)

### **Chiropractic Sciences**

#### **CHR 5121 Philosophy and Principles of Chiropractic I (2 credits)**

This course explores the evolving definition of chiropractic over time and promotes an understanding of the profession's unique role in the health-care delivery system. A historical survey of the health care environment of the late 19<sup>th</sup> century to the present is discussed along the various perspectives of chiropractic, health care in general, and what doctors of chiropractic do. This is the first of a five-part course series devoted to chiropractic principles, practice, and role in the greater health care community. (2+0)

#### **CHR 5222 Philosophy and Principles of Chiropractic II (1 credit)**

This course explores the range and types of chiropractic practice options. Topics include the spectrum of chiropractic examination and treatment procedures, professional practice options, the safety and public perception of chiropractic, and the profession's political and educational organizations, responsibilities, and agendas. (1+0)

#### **CHR 5323 Philosophy and Principles of Chiropractic III (1 credit)**

This course is devoted to the presentation and discussion of the theories of spinal motion segment dysfunction/subluxation. Topics include philosophy and its relationship to chiropractic theory and practice, the concept of the manipulable lesion, theoretic effects and mechanisms of adjustive therapy, and definitions, diagnosis, theoretic etiology, pathophysiology and health effects of spinal subluxation/dysfunction syndromes. (1+0)

#### **CHR 6224 Philosophy and Principles of Chiropractic IV (1 credit)**

This course focuses on various neurological models for spinal joint dysfunction and manipulation. A variety of mechanisms are presented related to the instigation of local and radiating pain, adverse neurological effects in the musculoskeletal system as well as the controversy regarding clinically significant visceral effects. (1+0)

#### **CHR 8225 Philosophy and Principles of Chiropractic V (2 credits)**

This course presents an advanced review, expansion and correlation of the clinical features of joint dysfunction/ subluxation syndromes, including causes, biomechanical and neurological effects, and treatment. Chiropractic management of common spinal conditions is reviewed and expanded, with emphasis on case-based problem solving and critical thinking. Current trends in chiropractic practice and managed care are surveyed. (2+0)

#### **CHR 8126 Philosophy and Principles of Chiropractic VI (1 credit)**

This course offers a series of companion lectures for Adjustive Technique VIII. Evaluation and an integrated treatment approach are presented in the treatment of common disorders of the cervical spine, temporomandibular joint, and cranium. Case scenarios are emphasized to assist problem solving and comprehensive management. (1+0)

#### **CHR 5125 Biomechanics/Palpation I Lecture (1 credit)**

This lecture course introduces the student to biomechanical and kinesiologic terms and concepts necessary for the development of observational and palpatory skills of the spine and extremities. (1+0)

#### **CHR 5136 Biomechanics/Palpation I Lab (1.5 credits)**

This lab course introduces the student to the fundamental examination skills of observation and palpation and instructs the student in the identification of normal bony and soft tissue landmarks of the spine and extremities. (0+3)

**CHR 5226 Biomechanics/Palpation II Lecture (2 credits)**

This course is devoted to the study of the functional anatomy and kinematics of the spine. Other topics presented include an introduction to the biomechanics of gait and a discussion of cavitation principles. (2+0)

**CHR 5234 Biomechanics/Palpation II Lab (2 credits)**

This lab course instructs the student in the physical assessment of spinal joint structure and function. Joint assessment procedures of static palpation, motion palpation, end feel, joint play, postural assessment, and range of motion assessment are presented. (0+4)

**CHR 6227 Biomechanics/Palpation III Lecture (2 credits)**

This course covers the biomechanical properties of muscles, nerves, and connective tissue and tissue injury and repair. Topics include stress-strain curves, length-tension relationships, hysteresis, types of loads and forces, and the response of various types of tissue. Additional emphasis is placed on the pathobiomechanics of low back and whiplash injuries. (2+0)

**CHR 6329 Biomechanics/Palpation IV Lecture (2 credits)**

Biomechanics/Palpation IV Lecture is a lecture course devoted to the study of functional anatomy and kinematics of the extremities. Laboratory sessions instruct the student in the examination of the extremities with special emphasis on neuromusculoskeletal evaluation and measurement. (2+0)

**CHR 6331 Biomechanics/Palpation IV Lab (1 credit)**

Biomechanics/Palpation IV Lab is a lab course devoted to the study of functional anatomy and kinematics of the extremities. Laboratory sessions instruct the student in the examination of the extremities with special emphasis on neuromusculoskeletal evaluation and measurement. (0+2)

**CHR 5231 Adjustive Psychomotor Skills (1 credit)**

This two-hour lab course is devoted to developing the foundation of body mechanics and spinal adjusting psychomotor skills that are central to the safe delivery of adjustive therapy. The course focuses on instruction in adjustive body mechanics, spinal and extremity muscle stretching and endurance training, proprioceptive training and adjustive pre-tension, and adjustive thrust (impulse) drills. (0 + 2)

**CHR 5321 Adjustive Technique I Lecture (2 credits)**

Adjustive Technique I Lecture is the first of a four-course sequence devoted to topics in spinal adjustive technique. This two-hour lecture course is designed to provide the student with an anatomical, biomechanical, and pathophysiologic basis for chiropractic adjustive therapy. It is structured to reinforce methods covered in adjustive technique lab sessions. Topics will include definition and classification of manual therapies, adjustive technique terminology, general and specific thoracic adjusting mechanics, adjusting contraindications/complications, adjustive therapy decision analysis, and adjustive treatment guidelines. (2+0)

**CHR 5332 Adjustive Technique I Lab (2 credits)**

Adjustive Technique I Lab is a four-hour course devoted to developing foundation adjustive skills and the development of the knowledge, physical exam, and psychomotor skills necessary to provide effective chiropractic adjustments of the spine, with a focus on the thoracic spine. Adjustive techniques include prone, supine, sitting and standing procedures. (0+4)

**CHR 6122 Adjustive Technique II Lecture (1 credit)**

Adjustive Technique II Lecture is a one-hour course devoted to the examination and treatment of pelvic manipulative disorders. It is designed to provide the student with an anatomical, biomechanical, and physiologic basis for the evaluation and adjustive management of pelvic subluxation/dysfunction syndromes. (1+0)

**CHR 6133 Adjustive Technique II Lab (1.5 credits)**

Adjustive Technique II Lab is a three-hour course devoted to the development of the psychomotor skills necessary for examination and adjustive treatment of pelvic dysfunction. Adjustive techniques include side posture, prone, and drop table procedures. Pubic symphysis adjustments and pelvic blocking techniques are also presented. Additional time is scheduled to review and reinforce examination and adjusting psychomotor skills of the thoracic spine. (0+3)

**CHR 6223 Adjustive Technique III Lecture (1 credit)**

Adjustive Technique III Lecture is a one-hour course devoted to the examination and treatment of lumbar manipulative disorders. The course provides an anatomical, biomechanical, and pathophysiologic basis for chiropractic manipulative therapy of the lumbar spine. It is designed to complement presentations covered in lumbar technique laboratory sessions. Topics include functional anatomy, biomechanics, evaluation, terminology, adjustive mechanics, complications/contraindications, and adjustive therapy guidelines and decision-making relative to the lumbar spine. (1+0)

**CHR 6234 Adjustive Technique III Lab (1.5 credits)**

Adjustive Technique III Lab is a three-hour course devoted to the examination and treatment of lumbar subluxation/dysfunction syndromes. The laboratory sessions are devoted to the development of the knowledge, physical

exam, and psychomotor skills necessary for effective chiropractic adjustments of the lumbar spine. Adjustive techniques include side posture, prone, and drop table procedures. Additional time is scheduled to review and reinforce examination and adjusting psychomotor skills of the pelvis and thoracic spine. (0+3)

**CHR 6324 Adjustive Technique IV Lecture (1 credit)**

This one-hour lecture course is devoted to topics in spinal adjustive technique. The course provides an anatomical, biomechanical, and pathophysiological basis for cervical and thoraco-cervical manipulative therapy. It is meant to complement presentations covered in cervical adjustive technique laboratory sessions. Topics include biomechanics, selected conditions and treatment, evaluation, and adjustive mechanics. Specific focus is given to the topics of spinal manipulation and vertebrobasilar complications. (1+0)

**CHR 6336 Adjustive Technique IV Lab (2.5 credits)**

This five-hour lab course is devoted to the development of adjustive technique skills as applied to the cervical spine. It provides the opportunity for the practical application of palpation, examination, identification of dysfunction, and treatment of the occiput, cervical, and thoraco-cervical spine. Adjustive techniques are presented in the supine, prone, and sitting patient positions, along with selected drop table procedures. (0+5)

**CHR 6337 Adjustive Technique V Introduction (1.5 credits)**

This three-hour course is devoted to the development of the knowledge, physical exam, and psychomotor palpation skills necessary for effective chiropractic joint play evaluation of the upper and lower extremities. (0+3)

**CHR 7137 Adjustive Technique V Advanced (1 credit)**

This two-hour course is devoted to the development of the knowledge, physical exam, and psychomotor adjustive skills necessary for effective chiropractic adjustments of upper and lower extremities. (0+2)

**CHR 7138 Adjustive Technique VI (1.5 credits)**

Adjustive technique VI is a three-hour review course designed to integrate and reinforce biomechanical assessment and adjustive technique skills covered in previous adjustive technique courses. (0+3)

**CHR 7327 Adjustive Technique VII Lecture (1 credit)**

This course reviews and refines the integrated manipulative procedures and management of common disorders of the thoracic spine, anterior chest wall, and upper extremity. There is also integration of philosophy and principles of the subluxation complex. (1+0)

**CHR 7338 Adjustive Technique VII Lab (1 credit)**

This course reviews and refines adjusting skills utilized in the management of thoracic, rib, and other upper extremity disorders. Soft tissue techniques and mobilizations are also reviewed and refined. Case scenarios are presented to discuss management and problem-solving skills. (0+2)

**CHR 8139 Adjustive Technique VIII (1 credit)**

This companion lab for Philosophy and Principles VI reviews and refines the integrated manipulative procedures used in the treatment of common disorders of the cervical spine, temporomandibular joint, and cranium. (0+2)

**CHR 8230 Adjustive Technique IX (1 credit)**

This course refines and integrates diagnosis, manipulation, and general chiropractic management of common disorders of the lumbar spine, pelvis, and extremities. Case scenarios are emphasized to assist diagnosis, comprehensive management, and patient communication. (0+2)

**CHR 8240 Adjustive Technique X (1 credit)**

Adjustive Technique X consists of a series of selected topics with demonstration of the manipulative procedures used for special problem cases or presentations followed by hands-on workshop. (0+2)

**CHR 6124 Soft Tissue Therapies/Rehabilitation I (2 credits)**

This course, the first of a two-part sequence, is devoted to the examination and treatment of the soft tissues of the body. Lecture presents evidence-based rationale for each of the soft tissue therapies. Laboratory topics include massage techniques, trigger point therapy, cross-fiber therapy, and muscle stretching techniques, with application of accepted protocols. (1+2)

**CHR 7227 Soft Tissue Therapies/Rehabilitation II (1.5 credits)**

This is the second of a two-course sequence devoted to treatment and rehabilitation of the soft tissues of the body. Topics include lumbar stabilization protocols, pain centralization protocols (based on McKenzie), muscle energy techniques, joint mobilization, distraction/decompression protocols (based on Cox), key movement patterns and sensory motor training. (0+3)

**CHR 6322 Neuromusculoskeletal Diagnosis and Treatment I Lecture (6 credits)**

NMS I Lecture introduces the diagnostic and therapeutic knowledge necessary for the management of lesions, defects, or disorders of the neuromusculoskeletal system. Discussion of mechanical, congenital, or traumatic and neuromusculoskeletal disorders affecting the spine and its adjacent soft tissue are emphasized. (6+0)

**CHR 6325 Neuromusculoskeletal Diagnosis and Treatment I Lab (1 credit)**

NMS I Lab introduces the diagnostic and therapeutic skills necessary for the management of lesions, defects, or disorders of the neuromusculoskeletal system. The skills of examination and management of mechanical, congenital, or traumatic and neuromusculoskeletal disorders affecting the spine and its adjacent soft tissue are emphasized. (0+2)

**CHR 7123 Neuromusculoskeletal Diagnosis and Treatment II Lecture (3 credits)**

NMS II Lecture is devoted to the examination, diagnosis, and management of lower extremity conditions, which may be mechanical, congenital, degenerative, or traumatic in nature. (3+0)

**CHR 7126 Neuromusculoskeletal Diagnosis and Treatment II Lab (0.5 credit)**

NMS II Lab is devoted to the development of the skills of examination, diagnosis, and management of lower extremity conditions, which may be mechanical, congenital, degenerative, or traumatic in nature. (0+1)

**CHR 7224 Neuromusculoskeletal Diagnosis and Treatment III Lecture (3 credits)**

NMS III Lecture is devoted to the examination, diagnosis, and management of upper extremity conditions, which may be mechanical, congenital, degenerative, or traumatic in nature. (3+0)

**CHR 7228 Neuromusculoskeletal Diagnosis and Treatment III Lab (0.5 credit)**

NMS III Lab is devoted to the development of the skills of examination, diagnosis, and management of upper extremity conditions, which may be mechanical, congenital, degenerative, or traumatic in nature. (0+1)

**CHR 7127 Taping and Splinting I (0.5 credit)**

This is a practical hands-on laboratory course intended to provide the chiropractic student with the basic knowledge and skills to appropriately select and apply necessary support and protection with athletic tape, elastic wraps, plaster splints, and OTC braces when treating common neuromusculoskeletal injuries and other common conditions of the lower extremity. (0+1)

**CHR 7229 Taping and Splinting II (0.5 credit)**

This is a practical hands-on laboratory course intended to provide the chiropractic student with the basic knowledge and skills to appropriately select and apply necessary support and protection with athletic tape, elastic wraps, plaster splints, and OTC braces when treating musculoskeletal injuries and other common conditions of the upper extremity. (0+1)

**CHR 7162 Chiropractic Physiological Therapeutics I (4 credits)**

This course introduces students to the adjunctive physiological therapeutic modalities available to the chiropractic physician. These modalities employ the use of heat, cold, water, electricity, light, and traction. The basic physics and physiological principles governing each modality are discussed, as well as indications, contraindications, and rationales for their application. The corresponding hands-on lab training develops proficiency in operating therapeutic equipment. Particular attention is given to understanding and application of the following: thermotherapy (hot packs, paraffin baths, heating pads, heat wraps, patches, infrared lamps, diathermy, ultrasound, etc.), cryotherapy (cold packs, ice packs, ice massage, vapocoolants, etc.), hydrotherapy (whirlpool baths, contrast baths, sitz baths, hot and cold extremity baths, etc.), electrotherapy (low voltage galvanism, high voltage pulsed current, low voltage alternating current, transcutaneous electrical nerve stimulation, microcurrent, interferential current, Russian Current, etc.), phototherapy (ultraviolet, low level laser therapy, etc.), and mechanotherapy (traction and gait appliances). Students learn which modality is most appropriate for particular disorders and conditions. (3+2)

**CHR 7265 Chiropractic Physiological Therapeutics II (4 credits)**

The emphasis of this course is on the principles and application of therapeutic exercise and rehabilitation of the locomotor system. A biopsychosocial model is presented in an effort to identify functional pathology and the consequences of deconditioning syndrome. Students learn how to perform a functional capacity evaluation for baseline assessment and outcomes assessment using goniometry, inclinometry, muscle length testing, muscle strength and endurance testing, key movement pattern testing, respiratory assessment, stability assessment, balance assessment, coordination assessment, and postural analysis. The student will learn the indications, contraindications, and application of specific exercise protocols for the purpose of improving range-of-motion, flexibility, strength, endurance, power, coordination, stability, aerobic conditioning, muscle balance, relaxation, proprioception, posture, gait, and functional locomotor control. (3+2)

## Clinical Education

### **CED 5142 Clinical Topics I (1 credit)**

This course introduces students to the process of transitioning into future doctors. This transformation involves the understanding of professionalism, the doctor-patient relationship, ethics, personal and professional use of electronic media, tolerance of social, ethnic, religious or lifestyle differences, jurisprudence/HIPAA, communication/ interpersonal skills, confrontational tolerance, touch and mindfulness. (1+0)

### **CED 6144 Clinical Topics II (1.5 credits)**

The purpose of the course is to teach students to take and appropriately chart a comprehensive patient history. Students will learn the introductory, basic legal requirements for charting, listening skills and strategies, interviewing skills and strategies, general clinical decision making strategies, chief complaint, past health, family health, and personal and social history taking skills, as well as review of systems. The lab portion for this course allows students to practice listening/communication skills, history taking skills and properly documenting a comprehensive patient history. By the end of this course students will be able to take and correctly chart from memory a comprehensive patient history. (1+1)

### **CED 6343 Clinical Topics III (1 credit)**

This course introduces students to topics related to routine patient care and introduction to the requirements of patient charting. Learning exercises emphasize development of patient management plans, clinical thinking relating to charting and the documentation of patient evaluation, diagnosis, management and treatment. (1+0)

### **CED 6262 Physical Diagnosis I Lecture (4 credits)**

This course is the first in a two-part series (see CED 6363) on the procedures and protocols associated with conducting a systematic physical examination. Emphasis is placed on integration of knowledge previously acquired in the basic sciences curriculum, the need to critically assess the patient's history and risk factors, the correlation between pathophysiologic changes and resultant clinical findings, the significance of these findings, and the prioritization of the patient's health care needs. The course includes discussion on the assessment and evaluation of the vascular system, thorax, lungs, abdomen, lymphatic system, thyroid gland, and ears. (4+0)

### **CED 6263 Physical Diagnosis I Lab (1 credit)**

This course is the first in a two-part series (see CED 6364) introducing the systematic examination and evaluation of the human body. Laboratory sessions provide instruction in the performance of various protocols and procedures associated with a routine physical examination. Students learn and demonstrate proficiency in the use of the stethoscope and sphygmomanometer in the evaluation of the vital signs, the arterial system, and the lungs and heart exam. Students also learn and demonstrate proficiency in the abdominal exam and the examination of the lymphatic system and thyroid gland. (0+2)

### **CED 6363 Physical Diagnosis II Lecture (4 credits)**

This course is the second in a two-part series (see CED 6262) on the procedures and protocols associated with conducting a systematic physical examination. Emphasis is placed on integration of knowledge previously acquired in the basic sciences curriculum, the need to critically assess the patient's history and risk factors, the correlation between pathophysiologic changes and resultant clinical findings, the significance of these findings, and the prioritization of the patient's health care needs. The course includes discussion on the assessment and evaluation of the visual system, the components and clinical application of the neurological exam, and the evaluation of the dizzy or vertiginous patient. (4+0)

### **CED 6364 Physical Diagnosis II Lab (1 credit)**

In this, the second part of a two-part series (see CED 6263), students continue learning physical examination protocols and procedures with associated treatment procedures. Students learn and demonstrate proficiency in performing routine examination of the eyes, ears, nose, mouth, throat, sinuses, the cranial nerves, and specific tests for assessing dizziness. Additionally, students learn to appropriately perform the following treatment procedures: ear irrigation, nasal specific, endonasal, Argylol sinus treatment, and Epley's maneuver. (0+2)

### **CED 7163 Cardiorespiratory Diagnosis and Treatment (3 credits)**

This course discusses common cardiorespiratory pathologies, their etiologies, clinical presentations, and associated risk factors. It reinforces previously acquired knowledge of cardiopulmonary anatomy and physiology so that abnormalities within these systems and the associated manifestations may be better understood and evaluated in relationship to the health care needs of the patient. Students will recognize the need for an adequate history, be familiar with signs and symptoms of common cardiorespiratory pathologies, and relate these clinical presentations to associated body systems. Students will understand associated risk factors and be able to assess a patient's general cardiorespiratory health status. Case management of those conditions amenable to conservative care is discussed, as are the indications for appropriate referral. (3+0)



**CED 7264 Gastroenterology Diagnosis and Treatment (3 credits)**

Common gastroenteric pathologies, their etiologies, symptomatology, and associated risk factors are covered. Students learn the signs, symptoms, and clinical manifestations associated with abnormal changes in gastrointestinal anatomy and physiology. Emphasis is placed on the incidence, prevalence, etiology, natural history, progression, clinical presentation, and differential diagnosis of selected conditions. Case management of those conditions amenable to conservative care is discussed, as are the indications for appropriate referral. Previously acquired knowledge of anatomy, physiology, public health parameters, history, physical exam findings, laboratory and radiologic evaluation, clinical decision-making, and clinical nutrition is integrated. (3+0)

**CED 7157 Clinic Phase I (3 credits)**

The purpose of the course is to support the knowledge and skills required to deliver care in the Clinical Internship series. The first half of the lecture portion is designed to review effective history taking and physical examination procedures as they apply to working up a musculoskeletal complaint during a new patient visit. Students are introduced to basic clinic documentation and the processes of working through a differential diagnosis, management plan, and prognosis. The second half of the lecture portion introduces clinical reasoning strategies for diagnosing and assessing musculoskeletal conditions as well as building evidenced-informed practice and critical thinking skills. Utilizing standardized patients, the lab portion is designed to promote the student's ability to apply examination skills from previous courses; begin to demonstrate proficiency in performing complete regional cervical, lumbar and general physical exam flows; and to synthesize clinical data into a working diagnosis and coherent management plan. (2+2)

**CED 7209 Clinic Phase II (3 credits)**

This course builds upon Clinic Phase I in the areas of effective history taking, physical examination, diagnosis and management planning, and evidence-informed practice skills. The overall goals of this course include increasing expertise in the realm of targeted exam skills, improving speed and efficiency in doing a clinical work up of a regional complaint (with a special emphasis on the spine), and improving overall clinical decision making. Additionally, there is special focus on clinical problem solving, increasing the breadth and depth of knowledge regarding selected spinal conditions and synthesizing pre-appraised literature for a clinical problem. Utilizing simulated patients, the lab portion is designed to promote the student's ability to perform a variety of regional exams and synthesize clues from the history, physical, and ancillary studies into a diagnosis and management plan. Areas of emphasis include EENT, heart/lung, abdominal and thoracic exams. The complete regional cervical and lumbar exam flows are revisited in addition to the introduction of the "focused" examination. (2+2)

**CED 7304 Clinic Phase III (3 credits)**

Building on the two previous Clinic Phase courses, this course continues the development of knowledge and skills in the domains of hands-on history and physical assessment, clinical decision making, diagnostic synthesis and management decisions, both for neuromusculoskeletal and visceral complaints. Emphasis is placed on the selection of evaluation procedures, clinical problem solving, practice following the critical pathway to properly focus patient evaluation, selecting management strategies, and further refinement of basic clinical and verbal/documentation skills. Utilizing standardized patients, the lab portion is designed to continue the student's ability to perform focused examinations of the shoulder, wrist, knee and ankle as well as refinement of the cervical and lumbar focused exams. Additionally, students will be given the experience of a walk-in trauma and an acute low back pain case. (2+2)

## **Clinical Sciences**

**CSC 5244 Information Mastery (1 credit)**

This course is designed to develop the search skills necessary to efficiently access health care literature and resources. Efficient search skills are a prerequisite to subsequent EIP courses and a skill that will be accessed frequently throughout the chiropractic program both in the classroom and during patient care. (1+0)

**CSC 6178 Evidence-Informed Practice I (2 credits)**

This course provides an introduction to evidence-informed chiropractic practice and clinical thinking, focusing on the realm of therapy. The course offers the student a conceptual framework to aid upcoming clinical studies. Hands-on practice and application of key concepts will be used to encourage effective problem-solving strategies and future application of evidence-informed practice (EIP) in the clinical experience. (2+ 0)

**CSC 6277 Evidence-Informed Practice II (2 credits)**

The course is a continuation of Evidence-Informed Practice I focusing on the realms of diagnosis, harm and prognosis. This course offers the student a conceptual framework to support upcoming clinical studies. Hands-on practice and application of key concepts will be used to encourage effective problem-solving strategies and future application of evidence-informed practice in the clinical experience. (2+0)

**CSC 8180 Evidence-Informed Practice III (1 credit)**

This course is a one-hour journal club format course designed to practice the application and refinement of evidenced-informed practice (EIP) skills first introduced in information mastery, EIP I and EIP II. These skills include accessing clinical

research evidence, critical appraisal of relevant primary studies and pre-appraised reviews on diagnosis, treatment, harm (risk), and prognosis. Interpretation and assessment of study results, and application to patient care is integrated with clinical experience and patient preference. (1+0)

**CSC 8280 Evidence-Informed Practice IV (1 credit)**

This course is a one-hour journal club format course designed to practice the application and refinement of evidenced-informed practice (EIP) skills first introduced in Information Mastery, EIP I and EIP II. These skills include accessing clinical research evidence, critical appraisal of relevant primary studies and pre-appraised reviews on diagnosis, treatment, harm (risk), and prognosis. Interpretation and assessment of study results, and application to patient care is integrated with clinical experience and patient preference. (1+0)

**CSC 6275 Dermatology and Infectious Disease (2 credits)**

This course is an introduction to common skin disorders frequently encountered in a chiropractic office. The structure, function, and immune reactions of skin are reviewed. Students acquire basic information necessary for differential diagnosis and treatment of common skin diseases. Benign, pre-malignant, and malignant tumors are covered, including squamous cell carcinoma, basal cell carcinoma, and malignant melanoma. Other topics include vascular lesions, birthmarks, and inherited diseases such as psoriasis and pemphigus. Differential diagnosis of eczema and dermatitis comprise a major portion of this course. Other common conditions include acne, bacterial and superficial fungal infections, connective tissue disease, and nail disorders. Students learn to provide conservative treatment and counseling to patients with a variety of skin diseases. (2+0)

**CSC 6367 Clinical Laboratory (4 credits)**

This course introduces clinical laboratory procedures, including hematology, blood chemistry, urinalysis, and serology. Students learn the appropriate use of clinical laboratory tests as screening and/or diagnostic tools and the differences between and significance of normal and abnormal laboratory values. Students learn to understand the importance of the sensitivity and specificity of various laboratory tests in explaining why a particular laboratory value falls outside the normal reference range. In the corresponding laboratory sessions, students learn “universal precautions,” risks associated with exposure to blood borne pathogens, and proper procedures for collecting blood and other specimens, and perform simple laboratory procedures that can be utilized as in-office tests. (3+2)

**CSC 7167 Clinical Pathology (3 credits)**

In this sequel to CSC 6367 Clinical Laboratory, students learn to synthesize clinical data in reaching a diagnostic conclusion. Students utilize detailed knowledge of common clinical laboratory procedures to diagnose, confirm clinical impressions, screen for disease, estimate prognosis, evaluate therapeutic progress, and relate laboratory findings to pathophysiological processes. They identify appropriate laboratory procedures for specific clinical situations and determine when an abnormal laboratory result is clinically significant. Students determine a differential diagnosis based upon laboratory findings in conjunction with associated historical facts and physical findings. Students must demonstrate knowledge of specific diseases/disorders, including etiology, pathophysiology, epidemiology, clinical and radiological features, routine and special laboratory findings, current therapeutic approaches, and appropriate referral protocols when indicated. (3+0)

**CSC 7175 Emergency Care (1 credit)**

This course prepares chiropractors to respond to traumatic injuries and sudden severe illness in non-clinical settings. Each student is instructed and examined in basic life support and cardiopulmonary resuscitation for certification through the American Heart Association. Good Samaritan Laws, consciousness assessment, poisoning, cardiac emergencies, near drowning, burns, etc. are covered. (1+0)

**CSC 7271 Clinical Nutrition and Botanicals I (4 credits)**

This course helps the student understand the role of diet modification and nutritional and botanical supplementation in the management of commonly encountered health disorders. The course begins by introducing the science underlying the use of botanical therapies and reviewing several basic therapeutic programs that use diet and lifestyle changes as well as supplementation with micronutrients, botanicals, or nutraceuticals. Subsequently, a body systems approach is used to present specific nutritional therapies for a variety of cardiovascular, musculoskeletal, psychoneurological, respiratory, and endocrine/metabolic disorders, including nutritional anemias. Additionally, cancer prevention and sports nutrition will be addressed. Discussions revolve around issues and controversies in current nutritional science. Assignments allow students to practice diet assessment, diet prescription, and the use of electronic resources for investigating scientific evidence for the efficacy and safety of nutritional and botanical interventions. (4+0)

**CSC 7372 Clinical Nutrition and Botanicals II (1 credit)**

This course continues to address the role of diet modification, nutritional supplementation and botanical therapies in the management of commonly encountered health disorders. Disorders of the gastrointestinal, genitourinary, and gynecological systems will be covered. (1+0)

**CSC 7324 Clinical Neurology (5 credits)**

This course covers neurological diseases and disorders with a focus on the central nervous system. The presented conditions are differentiated by their history, signs, and symptoms, and x-ray and laboratory findings. Special attention is placed on conditions commonly encountered or amenable to chiropractic care. (5+0)

**CSC 7375 Introduction to Pharmacology (3 credits)**

This course provides an introduction to the fundamental principles of pharmacology. Students learn about the pharmacokinetics (absorption, distribution, metabolism, excretion) and pharmacodynamics (mechanism of action, therapeutic effects, adverse effects) of the most commonly used prescription and over-the-counter drugs in North America. Emphasis is placed on those drugs most likely to influence the practice of chiropractic and natural medicine. (3+0)

**CSC 7365 Genitourinary Survey (5 credits)**

This course surveys the female and male reproductive and urinary systems focusing on the most common conditions seen in a general practice. GU Survey includes practical experience during three evening lab sessions where students perform gynecological, urological, and proctological examinations on live patient simulators. This course prepares the student for clinical evaluation of normal and abnormal presentations of the genitourinary system, including a basic review of anatomy, reproductive pathophysiology, diagnostic testing, and basic conventional and CAM treatments of genitourinary diseases. Lecture, guest speakers, case studies, class participation, and audiovisual aids prepare the student with pertinent history taking skills, clinical decision making, basic care and management skills as well as appropriate referral recommendations. (5+0)

**CSC 7366 Jurisprudence and Ethics (2 credits)**

This course systematically reviews the legal and ethical considerations that relate to the practice of chiropractic. It provides students with an understanding of basic principles of law and ethical conduct, focusing on the rights, privileges, and obligations of practitioners of the healing arts as well as those of the patient and public. Rules of evidence, licensure laws, civil and criminal malpractice, informed consent, negligence, expert witness testimony, and other legal aspects of chiropractic practice are covered. Guest lecturers present common standards of professional and ethical conduct and moral judgment. Students learn to recognize potential legal risks and how best to avoid litigious pitfalls. (2+0)

**CSC 8165 Correlative and Differential Diagnosis (4 credits)**

This course reviews a broad variety of diagnostic sciences, covering the more common clinical entities seen by chiropractic physicians, with extra emphasis on non-musculoskeletal complaints. Students refine their skill in clinical reasoning and increase their efficiency in obtaining data from and about patients. They learn to analyze data pragmatically to obtain the most appropriate diagnosis of a patient's condition. Particular attention is given to techniques for obtaining patient information through the interview process and strategies for clinical decision-making. Students distinguish between relevant and peripheral clinical issues; differentiate key clues from nonspecific findings; distill clinical information from a list of specific problems and create an appropriate diagnosis. Course material is presented in lectures, supplemented with discussions of case histories and role-playing of doctor/patient interactions. (4+0)

**CSC 8167 Minor Surgery/Proctology (2.5 credits)**

This course is a systematic review of pertinent pathological conditions as minor surgical presentations and their resolution through minor surgical means and procedures. It provides academic and practical insights into minor surgical and proctological presentations with knowledge and practical skills for surgical interventions. Students become familiar with the legal limitations of minor surgery and how to identify associated risk factors. Students are instructed in the appropriate use of sterile fields, administration of local anesthetics, closure of traumatic wounds, and elective surgical procedures. They cover the surgical management of lipomas, sebaceous cysts, inclusion cysts, growths, fibromas, lacerations, ingrown nails, and other presentations amenable to surgical intervention. Special attention is given to surgical interventions for various anorectal disorders, such as internal and external hemorrhoids, anal fissures, skin tags, inflammatory bowel disease, and others. (2.5+0)

**CSC 8178 Minor Surgery Lab Elective (0.5 credit)**

This is the elective companion lab to CSC 8167 Minor Surgery/Proctology. Successful completion of both lecture and lab are required for chiropractic licensure in the state of Oregon. This hands-on lab provides practical experience in acquiring those skills necessary in minor surgical services. Students practice establishing sterile fields for the surgical instruments, the doctor, and the patient. Students practice appropriate infiltration techniques associated with the administration of local anesthetics. Students practice appropriate suturing techniques that may be commonly used in a minor surgery practice. (0+1)

**CSC 8173 Obstetrics (2 credits)**

This course reviews reproductive physiology, introduces the field of obstetrics, and working with pregnant patients in the chiropractic setting. It lays a foundation for students who may later choose to pursue in depth study or co-manage pregnant clients in their practice. Lectures, guest speakers, and audiovisual aids familiarize the student with normal pregnancy and birth, variations from normal, and many of the available options for pregnant women/couples. Students will gain knowledge on how to counsel their pregnant or lactating patients regarding optimal nutrition, appropriate exercise programs, spinal

care, and general patient well-being at all the stages from pre pregnancy to postpartum. Warning indicators of pregnancy, labor, and postpartum complications are also addressed. (2+0)

**CSC 8266 Clinical Pediatrics (3 credits)**

This course focuses on the normal growth and development of children and the most common issues in their health care. Students become familiar with developmental milestones and learn to identify individuals who are not developing within normal expectations. Particular attention is given to conducting a well-child examination, identifying the most common childhood illnesses, and assessing and managing orthopedic conditions. Students learn how to communicate effectively and respectfully with children and how to identify risk factors, signs, and symptoms of child abuse and the laws regarding reporting of suspected abuse. Problems that can be managed with conservative chiropractic care and those that require appropriate referral are differentiated. (3+0)

**CSC 8267 Clinical Geriatrics (2 credits)**

This course provides an understanding of the unique characteristics of the elderly patient and explores the effects of aging and chronic degenerative processes. Students become familiar with the evaluation and conservative management of geriatric disorders, focusing on the normal physiologic changes associated with aging and normal variants in geriatric physical examination findings. Danger signals associated with life-threatening disorders are investigated, along with utilization of appropriate decision-making strategies for proper care of the patient. Tests and screening evaluations are investigated to determine those that best identify declining health related functions. Intervention options that restore and maintain the quality of life are discussed. Specific attention is given to nutritional inadequacies, deconditioning, gait and balance disorders, mental dysfunction, hearing and vision impairment, and medication-related problems. (2+0)

**CSC 8268 Clinical Psychology (3 credits)**

This course is a survey of clinical psychology as pertinent to chiropractic practice. Students will attain proficiency in subject areas requisite for successful performance on the licensing examination for chiropractic physicians, acquire interpersonal skills as they relate to patient interviewing and gain basic understanding of behavioral principles and their application in various forms of psychotherapy. Instructional time is sectioned into three formats: 1. an interactive, participatory lecture/discussion, 2. learning and practicing clinical skills relevant to interviewing and supporting a patient while screening and detecting likely psychopathology, and 3. case presentations and discussion relevant to the day's topics. Students will identify and discuss (without compromising confidentiality) at least 2 patients that have shown some evidence of psychopathology or behavioral problems. (3+0)

**CSC 6270 Patient/Practice Management I (1.5 credits)**

This course explores development of doctor/patient trust and cooperation as achieved in initial conversations and interactions. It clarifies the legal and fiduciary requirements of the physician as well as identifying strategies and priorities in communication with patients under a variety of situations that realistically happen in practice. Students will conduct report of findings, PARQ conference and informed consent procedures using best practices approaches. Students will also learn a strategy to deliver difficult news such as a cancer diagnosis or other serious health problem to patients. Last, this course provides counsel and advice to student-physicians on how to screen for and evaluate difficult circumstances such as intimate partner violence, substance abuse, diversity issues and sexual boundary violations. Successful students will be equipped to better evaluate and resonate with patients in ways that facilitate satisfaction & compliance with care. (1+1)

**CSC 7172 Patient/Practice Management II (1 credit)**

This course focuses on the knowledge and skills necessary to bill patients and third party payers for services performed utilizing ethical, legal and efficient strategies. Students learn billing codes and procedural requirements underpinning use of those codes. Students demonstrate ability to appropriately apply various coding modifiers and demonstrate ability to justify coding and billing through appropriate health record for all billing codes. They will also develop skills at performing billing and coding for a variety of chiropractic and primary care services that are within the scope of chiropractic in Oregon. (1+0)

**CSC 7376 Patient/Practice Management III (1 credit)**

This course focuses on how to ethically, professionally and effectively market and position yourself and your practice. The first portion of this class will be focused on marketing yourself - creating a resume, learning how to network and best practices for jobs searching. The second portion of this course will focus on effectively marketing your practice, both internally and externally. Students will explore various forms of advertising including social media, web presence, word of mouth, networking and print advertising. It will also reinforce understanding of the legal requirements and restrictions of advertising in health care. (1+0)

**CSC 8170 Patient/Practice Management IV (2 credits)**

This course focuses on business planning and development. It addresses the analysis, planning, and establishment of a successful chiropractic business. The essential elements of any good business will be discussed, with an emphasis on chiropractic business start-ups. Students are introduced to concepts of business management and learn the key requirements needed to start and maintain a successful chiropractic business. Particular attention is given to writing a business plan that can be used to secure financing. Students learn how to implement advanced marketing techniques to promote their business, advanced aspects to insurance billing and collections, hiring and training office staff and support personnel, and the

financial aspects of running a business. This course explores crucial issues such as insurance needs, money management and retirement accounts, tax considerations, and business structures. (2+0)

**CSC 8270 Patient/Practice Management V (1 credit)**

As students approach graduation, the specter of actually going into practice looms. This course explores the variety of possible entry points into practice, identifying benefits, liabilities, areas of potential trouble of all. This course will also describe the landscape of how to evaluate the quality of any of the possible entry points into practice, be it associateship as an employee or independent contractor or as a practice owner via buy-out of an existing practice or starting de novo. Examples of good and bad employment agreements, leases, practice valuation assessments and other details will be discussed. This course will ensure an informed decision when considering a particular starting point into practice. (1+0)

**CSC 5182 Radiographic Anatomy I (2.25 credits)**

This is the first in a series of three courses in the study of radiographic anatomy. Since plain film radiography is widely used in chiropractic practice, identification of key spinal and contiguous spinal structures seen on plain film radiography is the emphasis of this course. Basic anatomy of the spinal regions seen on computed tomography and magnetic resonance imaging is also studied. Lectures demonstrate the most important structures to identify on various imaging modalities. Lab sessions provide supervised radiograph and slide viewing with an opportunity to interact with the instructors. (1.5 + 1.5)

**CSC 5283 Radiographic Anatomy II (1.5 credits)**

This course is the second in a series of three courses in the study of radiographic anatomy. The identification of structures of the upper and lower extremities seen on plain film radiography is the emphasis of this course; the cranium is also reviewed. Basic anatomy of the upper and lower extremities and the cranium seen on computed tomography and magnetic resonance imaging is also studied. Lectures demonstrate the most important structures to identify on various imaging modalities. Lab sessions provide supervised radiograph and slide viewing with an opportunity to interact with the instructors. (1+1)

**CSC 6184 Radiographic Anatomy III (1.5 credits)**

This course is the last in a series of three courses in the study of radiographic anatomy. Identification of soft tissue structures of the head, neck, chest, abdomen, and pelvis seen on plain film radiography is the emphasis of this course. Basic anatomy of these regions seen on computed tomography and magnetic resonance imaging is also studied. Lab sessions provide supervised radiograph and slide viewing with an opportunity to interact with the instructors. (1+1)

**CSC 6386 Radiographic Technique I (4.5 credits)**

This is the first in a series of three courses in the study of radiographic technique. Since a large percentage of chiropractic physicians own and operate radiographic equipment in their offices, the skills acquired in these classes are essential for proper use and application within their clinical practices. This course emphasizes radiation physics, x-ray production, radiobiology, radiation safety, exposure principles, and image production/processing. Students learn to assess film quality and begin to understand imaging procedures that augment plain film imaging technology. (4+1)

**CSC 7187 Radiographic Technique II (1.5 credits)**

This course is the second in a series of three courses in the study of radiographic technique. Proper anatomical positioning is presented. Imaging of the cervical, thoracic, and lumbar spinal regions is emphasized. Positioning for chest and bony thorax is also covered. Principles of physics used in radiography are reviewed and discussed. The student will demonstrate skill in radiographic positioning technique and patient protection from ionizing radiation in the performance of mock radiographic exams. (1+1)

**CSC 7288 Radiographic Technique III (1.5 credits)**

This course is the last of the series in the study of radiographic technique. This course covers the proper anatomical positioning required to demonstrate the upper and lower extremities and pelvis. Positioning for plain film abdomen radiography is also covered. The student will demonstrate skill in radiographic positioning, technique, and patient protection from radiation in the performance of exams of the upper and lower extremities and pelvis. Students will perform mock radiographic exams on their peers. (1+1)

**CSC 7192 Bone Pathology I (2.5 credits)**

This is the first in a series of five courses covering the clinical application of diagnostic imaging modalities and interpretation. Knowledge and reasoning skills necessary for accurate interpretation and selection of diagnostic imaging modalities within clinical practice are emphasized in this series. Bone Pathology I is an introduction to a systematic approach to the radiographic interpretation and case management of normal variants, congenital anomalies, common miscellaneous acquired conditions, fractures, and dislocations. (2+1)

**CSC 7293 Bone Pathology II (3.5 credits)**

This is the second in the series of courses covering the clinical application of diagnostic imaging modalities and interpretation. Students are introduced to the radiologic, laboratory, and clinical manifestations of the more common neoplasms, infections, and arthritides. Appropriate management and/or patient referral for each disease are discussed. Various visual media are used in presenting course material. (3+1)

**CSC 7394 Bone Pathology III (1.5 credits)**

This is the third in the series of courses covering the clinical application of diagnostic imaging modalities and interpretation. This course covers the radiological manifestations, clinical and laboratory presentations, and management of osteochondroses, skeletal dysplasia, nutritional, metabolic, endocrine, and hematological conditions affecting the skeletal system. Students review special imaging procedures, such as computed tomography, magnetic resonance imaging, bone scan, ultrasound, discography, and myelography. Cases utilizing these modalities are presented. Appropriate indications and contraindications are reviewed with an emphasis on appropriate imaging decisions. (1+1)

**CSC 8295 Bone Pathology IV (1.5 credits)**

This is the last in a series of five courses covering the clinical application of diagnostic imaging modalities and interpretation. Diagnostic imaging is an integral part of chiropractic practice. This course provides the student with a review of all topics previously covered in the radiology courses. This review course near the end of the formal chiropractic education better prepares students for the realities of practice. (1+1)

**CSC 8199 Soft Tissue Interpretation (1.5 credits)**

This is the fourth course in the series covering the clinical application of diagnostic imaging modalities and interpretation. This course covers diagnostic imaging of the chest and abdomen. A pattern approach to teaching common cardiorespiratory, gastrointestinal, and genitourinary conditions is used. The student is taught how to recognize abnormal radiographic patterns and is introduced to preliminary management protocols. Definitive diagnosis is often not possible due to limitations in scope of practice and access to specialized imaging and laboratory procedures. Therefore, the focus of this course is on recognition and preliminary management. (1+1)

## **Clinical Internship**

**CLI 7160 Clinical Internship I (2 credits)**

This course is the first of a six-course series in clinic internship. The class consists of lab and clinic experiences. Lab exercises will provide simulations in aspects of patient communication, evaluation, management, and recordkeeping. Students will also provide chiropractic treatments to fellow classmates in the Campus Health Center including appropriate evaluation, provision of care, and recordkeeping. Students enrolled in Clinical Internship 1 are encouraged to continue their regular care in the Campus Health Center as prescribed by their attending physician. An integral part of this class will be developing skills in assessing for and providing chiropractic care which includes spinal manipulation, learning how to conduct an office visit in an efficient manner, developing comfort with the provider role, communication with patients, as well as learning how to correctly document findings and care provided to patients. Students will complete an on-line training course in use of the EHR (electronic health record). Students will also perform a re-evaluation on a simulated patient case and incorporate those findings into a management plan. The report writing portion of the course will be exclusively online and will focus on correspondence a chiropractic physician would be expected to produce in practice including progress reports, referral letters to colleagues and specialists, patient discharge letters and case summaries. (1+2)

**CLI 7208 Clinical Internship II (2 credits)**

The clinical internship course series provides students with increasing opportunities to apply, integrate, and refine the knowledge, skills and behaviors necessary to become confident, competent, and caring primary care chiropractic physicians. Occurring within a clinic setting, interns incorporate evidence-informed clinical reasoning in applying effective healthcare procedures and professional integrity in the delivery of patient-centered care. Interns are mentored and supervised by attending physicians who facilitate patient care and clinical education while ensuring quality patient care. At this early point in the clinical internship course series, interns are closely supervised by attending physicians and limited to active involvement in less complicated cases. Upon initiation of this course, students complete a clinical entrance assessment, consisting of patient evaluation and management skills, to verify level of readiness for involvement in patient care. (0+6)

**CLI 7305 Clinical Internship III (3.25 credits)**

The clinical internship course series provides students with increasing opportunities to apply, integrate, and refine the knowledge, skills and behaviors necessary to become confident, competent, and caring primary care chiropractic physicians. Occurring within a clinic setting, interns incorporate evidence-informed clinical reasoning in applying effective healthcare procedures and professional integrity in the delivery of patient-centered care. At this point in the clinical internship course series, interns continue to be closely supervised by their attending physician, treating similar cases as in clinical internship II, but the hours engaged in patient care are increased. Completion of the written and practical clinical skills assessment examination occurs concurrently with enrollment in this course. (0+10)

**CLI 8157 Clinical Internship IV (8.25 credits)**

The clinical internship course series provides students with increasing opportunities to apply, integrate, and refine the knowledge, skills and behaviors necessary to become confident, competent, and caring primary care chiropractic physicians. Occurring within a clinic setting, interns incorporate evidence-informed clinical reasoning in applying effective healthcare procedures and professional integrity in the delivery of patient-centered care. In this course, interns engage in patient care



five days each week, actively participating in the management of increasingly complex and challenging cases. Interns are also given their first opportunities to engage in patient care at university health centers off campus as well as community clinics that partner with the university. Completion of the radiology clinical skills assessment occurs concurrently with enrollment in this course. (0+25)

#### **CLI 8258 Clinical Internship V (8.25 credits)**

The clinical internship course series provides students with increasing opportunities to apply, integrate, and refine the knowledge, skills and behaviors necessary to become confident, competent, and caring primary care chiropractic physicians. Occurring within a clinic setting, interns incorporate evidence-informed clinical reasoning in applying effective healthcare procedures and professional integrity in the delivery of patient-centered care. Interns continue to gain autonomy yet remain under the mentorship and guidance of supervising attending physicians. Interns become increasingly responsible for the management of complex and challenging cases and conditions. (0+25)

#### **CLI 8361 Clinical Internship VI (9 credits)**

The clinical internship course series provides students with increasing opportunities to apply, integrate, and refine the knowledge, skills and behaviors necessary to become confident, competent, and caring primary care chiropractic physicians. Occurring within a clinic setting, interns incorporate evidence-informed clinical reasoning in applying effective healthcare procedures and professional integrity in the delivery of patient-centered care. Interns continue to provide patient care in this final clinical internship course. Most interns have the opportunity to participate in the university preceptorship program, completing their clinical education in a private practice setting. Upon successful completion of this course, interns will have demonstrated the competencies necessary for unsupervised chiropractic practice. (0+27)

### **Clinical Skills Assessment**

In accordance with Policy 1220 Graduation Requirements (DC Program) all DC students must pass each Clinical Skills Assessment (CSA) to be eligible to graduate.

#### **CSA 7313 Written Clinical Skills Assessment**

The two-hour written CSA is designed to assess clinical knowledge and clinical reasoning skills and draws from all Q1-Q8 course work. The written CSA includes multiple-choice, matching, fill-in-the-blank, and short-answer questions categorized into seven topical subsections: history/differential diagnosis, physical examination, lab, imaging, diagnosis, case management and evidence informed practice (EIP).

#### **CSA 7314 Practical Clinical Skills Assessment**

The practical CSA is modeled after NBCE Part IV and consists of 16, six-minute, graded stations and draws from all Q1-Q8 course work. Students perform a series of specified procedures including history, examination, and simulated treatment on a trained standardized patient. The student's performance is observed by a trained evaluator and assessed using detailed grading rubrics. Students must also answer written questions related to the clinical condition exhibited by the patient including necessary diagnostic testing, diagnosis, and case management/recommended treatment.

#### **CSA 8165 Radiology Clinical Skills Assessment**

The radiology CSA consists of 10, five-minute stations during which students are expected to employ critical thinking to demonstrate their knowledge of radiographic anatomy, radiographic technique, and radiographic pathology for described case scenarios. Students are provided limited case information and must answer multiple choice questions about radiographic findings, differential diagnosis, patient management, and radiographic technique. The format of the exam is intended to help prepare students for NBCE Part IV and draws from all Q1-Q9 radiology course work.

# College of Graduate and Professional Studies

The college of graduate and professional studies offers the following master's degrees, certificates and residencies/fellowships in the health sciences:

- MS Sports Medicine
- MS Exercise and Sports Science with concentrations in:
  - Sports Performance and Coaching Science (MS)
  - Fitness and Wellness Management (MS)
  - Sports and Athletic Administration (MA)
- MA Exercise and Sports Science with concentration in Sports and Athletic Administration
- MS Sport and Performance Psychology
- MS Human Nutrition and Functional Medicine
- MS Diagnostic Imaging/Radiology Residency
- Certificate of Advanced Study (CAS) in:
  - Athletic Administration
  - Applied Sport Psychology
  - Wellness Coaching
  - Sports Nutrition
- Graduate Certificate in Human Nutrition and Functional Medicine

## Mission

The mission of the college of graduate and professional studies is to prepare learners to graduate as exceptional professionals and to advance interdisciplinary graduate education and research.

## General Admission Requirements to the College of Graduate and Professional Studies:

- A bachelor's degree completed with a minimum cumulative 2.75 GPA from a regionally accredited college or university. International students must have completed the equivalent of a four-year American baccalaureate degree. While a bachelor's degree is preferred, applicants who hold an accredited first-professional degree (e.g., DC, ND, MD, etc.) are not required to also hold a bachelor's degree.
- Applicants with cumulative GPAs that are below 2.75, but at least 2.50, may still be accepted with at least a median score on a standardized graduate entrance exam, such as the Graduate Record Examination (GRE) or Miller Analogies Test (MAT).
- Official transcripts from all colleges and universities attended.
- Prospective students for whom English is not their native language must provide proof of adequate English language skills. UWS expects a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL iBT). Alternatively, a minimum score of 7.0 on the International English Language Testing System (IELTS) will satisfy the language requirement. This language requirement is waived for applicants who graduated from a U.S. university.
- Two letters of recommendation.
- Must be able to operate a computer that is equipped with a microphone and computer camera (webcam), have access to a reliable computer, and have a dependable connection to the Internet.
- Applicants with special situations who do not meet these criteria may submit an application, which will be considered on a case-by-case basis.

Program-specific admission requirements are listed below under each program.

## Transfer Credit

Students may transfer a maximum of 15 quarter graduate credits into a master's degree program. Graduate credit may be transferred from within UWS or from another accredited institution. To request transfer credit, complete and submit a request for Graduate Credit Transfer available in the office of the registrar prior to the end of the term before completing the degree.

The following graduate credit transfer conditions must be met:

- Grade/s of transferred courses must be at least B- or P.
- The course/s must reasonably match the courses being replaced.
- The college of graduate and professional studies must approve the transfer.

Students in the MS-ESS sports medicine track may transfer a maximum of 22.5 quarter credits or 15 semester credits from a first-professional degree program in a field of healthcare.

### **Graduate Professional Development - Non-Degree Enrollment**

The college of graduate and professional studies offers graduate professional development courses (GPD) in the areas of effective teaching, technology in education, academic administration, and others. Under [Policy 1214 Non-Degree Students Graduate and Professional Studies](#) qualified students may enroll in GPD courses without being admitted to a UWS program as non-degree seeking students. Enrollment as a non-degree student does not imply a commitment to grant program admission at a later date. If subsequently admitted to the degree program, up to 15 non-degree credits with a grade of B or higher may be applied toward the degree. Refer to the university website for further information and a list of courses that are currently offered.

### **Financial Aid - Master of Science Programs**

All fully admitted, regular, degree-seeking MS students enrolled at least halftime (five credits or more per term) in the MS program are automatically considered for all types of aid in the order listed below. Students who were awarded aid for a given term, but enroll in fewer than five credits in a subsequent term, must notify the office of financial aid.

Students are awarded the maximum amount of each type of aid, based on their eligibility as calculated by the U.S. Department of Education:

#### **Federal Direct Stafford Loans** - Also known as unsubsidized Stafford Loans

- The U.S. Department of Education is the lender; they will assign a servicer.
- Annual Direct Loan limit: \$20,500.
- Aggregate (lifetime) Direct Loan limit: \$138,500, certain loans borrowed in the DC or other medical programs may not count against the \$138,500 limit.
- Interest accrues from the time of disbursement on unsubsidized Direct Loans.
- No payments are required while students are enrolled at least halftime.
- Fees: approximately 1.0 percent (deducted from each loan disbursement). Information on interest rates is available online at <https://studentaid.ed.gov/sa/types/loans/interest-rates> or from the financial aid office.

#### **Federal Direct Grad PLUS Loans**

- Annual limit: Cost of Attendance minus other financial assistance, such as loans and scholarships.
- Credit check required; co-signer may be required in some cases.
- The U.S. Department of Education is the lender; they will assign a servicer.
- Fees: approximately 4.2 percent (deducted from each loan disbursement). Information on interest rates is available online at <https://studentaid.ed.gov/sa/types/loans/interest-rates> or from the financial aid office.

### **Other Non-Federal Sources of Funding**

Admitted and non-admitted students in all programs may be eligible for non-federal sources of funding. Please refer to the catalog section on Tuition and Financial Aid Overview for information on non-federal sources of funding.

### **Satisfactory Academic Progress for Financial Aid Eligibility (SAP) - Master's Programs**

Federal regulations require all students receiving federal student aid to make satisfactory academic progress (SAP) toward a degree or certificate in order to retain eligibility for financial aid. Failure to maintain SAP, including minimum cumulative GPA and adequate progress toward degree completion, will result in the disqualification from federal student aid programs at UWS. Please refer to [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

## Master of Science - Sports Medicine

The sports medicine program is a graduate-level, professional master's degree program designed to provide students with advanced training in the prevention, evaluation, and management of injuries and disorders affecting athletes and others participating in sports activities. As a professional master's degree, it is targeted at students with prior training in the evaluation and management of neuromusculoskeletal disorders. This audience includes chiropractic degree program students, chiropractic physicians, athletic trainers, occupational therapists, physical therapists, and other health care providers. The program is designed to also satisfy most or all of the requirements of chiropractic specialty certification programs in sports medicine.

This science-based, clinically-oriented program provides a level of experience and expertise necessary for either specialty care of sports injuries within a chiropractic practice, or for the prevention assessment, treatment, and rehabilitation of sports injuries in a multidisciplinary context. The university places an emphasis upon the appropriate use of scientific evidence and other legitimate sources of knowledge to inform and improve practice, to reduce errors in clinical settings, and to optimize clinical effectiveness for patients.

The program consists of a combination of online lecture, hands-on laboratory exercises, and practical field-based experiences (practicums). The latter includes supervised interaction with athletes in training rooms, at sporting events, ambulatory care clinics, and sports injuries rehabilitation centers.

The master's degree program culminates with a capstone course, which may consist of a portfolio project requiring the student to evaluate and reflect upon significant practical experiences gained through the program, with the emphasis on analysis and critique of those experiences, case studies, review of literature, or other approved scholarly activities.

### Concurrent DC-MS On-Campus Format

Doctor of chiropractic students receive an extensive foundation in neuromusculoskeletal anatomy, physiology, biomechanics, and kinetics. The MS-ESS Sports Medicine program builds on this foundation. The program is offered over a minimum of 7 quarters and requires the completion of 60.5 quarter credits, 22.5 of which can be earned from the doctor of chiropractic degree curriculum. These 22.5 credits are dually attributable to the DC and MS degrees. The remaining 34 credits are from courses offered exclusively to MS degree students.

Students who matriculated in the chiropractic program, without a bachelor's degree, may earn the UWS BS degree in human biology after successful completion of Q5 in the DC degree program and will, therefore, satisfy the undergraduate degree admission requirement for the MS-ESS program. DC students must have successfully completed these first five quarters of the DC curriculum prior to matriculation in the MS program.

### Distance Student Format

The sports medicine distance student format is designed for field practitioners and students who are not enrolled in the DC program. Course content and instructors are the same as for those students concurrently enrolled in the DC and MS programs, but the hands-on laboratory components are provided in a condensed weekend format, whereby students are required to be on the UWS campus for one or two weekends per term, depending on the number of courses taken. Practicum experiences can be completed through UWS-organized practicums or through pre-approved offsite practicum locations.

### Admission Requirements - MS Sports Medicine

- A first-professional degree in a field of healthcare that includes the following, or similar, coursework (equivalent to at least 22.5 quarter credits or 16 semester credits):
  - Neuromuscular Diagnosis and Treatment
  - Biomechanics
  - Soft Tissue Therapies/Rehabilitation
  - Physiological Therapeutics
- Students currently enrolled in a first professional healthcare degree program that includes the above coursework:
  - Bachelor's degree
  - Minimum 2.5 GPA in current professional healthcare program
  - 6<sup>th</sup> quarter or 4<sup>th</sup> semester status or above
  - Attend an on-campus informational session or participate in an in-person or telephone interview with the MS-ESS program director or a program instructor.

## Technical Standards and Required Abilities for Admission

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

## Graduation Requirements - MS Sports Medicine

The MS-ESS Sports Medicine is conferred upon the individual who has fulfilled the following requirements:

1. Seven quarters of resident study as a matriculated, graduate degree seeking student, with a minimum 2.5 grade point average and 60.5 quarter credits applicable to the MS program.
2. Maintenance of enrollment eligibility through satisfactory academic performance, professional development and behavior, and non-academic behavior.
3. Successful completion of all required courses, lectures, labs, practicums, and seminars with a minimum cumulative GPA of 2.75 on all required coursework.
4. Successful completion of minimum graduation requirements as officially communicated to students through the university catalog, student publications, and other official documents of the university.
5. Freedom from all indebtedness and other obligations to the university.

## Competencies and Expected Learning Outcomes - MS Sports Medicine

Competency	Learning Outcome
1 Integrate basic sciences information pertaining to sports performance and athletic injuries into diagnosis, management and prognosis assessment of athletes.	Identify, assess and differentiate anatomical structures and physiological concepts relevant to sports injuries and performance optimization situations.
2 Integrate the principles of performance enhancement into the evaluation and management of athletes.	Identify and implement strategies for performance enhancement based on the needs of the athlete.
3 Effectively and efficiently evaluate athletes using best practices strategies to establish differential diagnoses and diagnoses for the purpose of planning treatment for athletes.	Select, interpret and evaluate results from the history and examination procedures used to establish diagnoses and management plans for athletes.
4 Effectively and efficiently manage conditions affecting athletes using evidence-supported treatment and management strategies.	Select, sequence, analyze and demonstrate management protocols and treatment modalities that are evidence-informed.
5 Evaluate, identify and implement specific nutritional plans and prescriptions to enhance healing and performance needs of athletes.	Define, describe and conduct nutritional assessments and/or produce and implement nutritional support strategies based upon clinical needs.
6 Identify and apply taping, supportive bracing, and appliances to prevent injury, enhance injury healing, and enhance athletic performance of athletes.	Select and apply bracing and taping modalities according to the clinical needs of the athlete.
7 Perform emergency management and triage of injured athletes on and off the field of competition.	Perform and interpret the results of emergency assessment and management procedures.
8 Evaluate and manage the needs of athletes from common special populations including, but not limited to, differentially-abled athletes, older athletes, younger athletes, pregnant athletes, and athletes with chronic conditions.	Effectively evaluate and manage special patient populations acknowledging any necessary alterations needed for treatment purposes.
9 Demonstrate knowledge and use of ethical and professional practice behaviors.	Describe, debate, demonstrate, and examine ethics and professionalism in the sports injury practice. Understand and demonstrate the ability to communicate with necessary stakeholders (team management, public, media, family, athlete representatives, other health care providers, etc.) regarding athlete status.

## Curriculum Sequence - MS Sports Medicine

The three-letter abbreviation that begins each course designation indicates its academic area:

CHR = Chiropractic Sciences  
MSE = Master of Science - Exercise

Following is the current list of courses and the quarters in which they are offered. Courses with the CHR or CSC identifiers are in the DC degree curriculum. Courses with the MSE identifier are unique to the sports medicine program. DC students who are dually enrolled in the sports medicine program take 4-6 credits of MS-ESS coursework each quarter in addition to the DC coursework.

Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
1	CHR 6322*	NMS Diagnosis and Treatment I Lecture	6	0	0	66	6	G
1	CHR 6325*	NMS Diagnosis and Treatment I Lab	0	2	0	22	1	P/F
1	CHR 6329*	Biomechanics/Palpation IV Lecture	2	0	0	22	2	G
1	CHR 6331*	Biomechanics/Palpation IV Lab	0	2	0	22	1	P/F
1	MSE 6311	Exercise Physiology	3	2	0	55	4	G
1	MSE 7131	Special Populations	1	0	0	11	1	G
		<b>Q1 Totals</b>	<b>12</b>	<b>6</b>	<b>0</b>	<b>198</b>	<b>15</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
2	CHR 7123*	NMS Diagnosis and Treatment II Lecture	3	0	0	33	3	G
2	CHR 7126*	NMS Diagnosis and Treatment II Lab	0	1	0	11	.5	P/F
2	MSE 6550	Sport Psychology	4	0	0	44	4	G
2	MSE 7151	Emergency Management	2	2	0	33	3	G
		<b>Q2 Totals</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>132</b>	<b>10.5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
3	CHR 7227*	Soft Tissue Therapies/Rehabilitation II	0	3	0	33	1.5	G
3	CHR 7224*	NMS Diagnosis and Treatment III Lecture	3	0	0	33	3	G
3	CHR 7228*	NMS Diagnosis and Treatment III Lab	0	1	0	11	.5	P/F
3	CHR 7265*	Chiropractic Physiological Therapeutics II	3	2	0	55	4	G
3	MSE 7211	Advanced Sports Medicine I (LR)	4	2	0	66	5	G
		<b>Q3 Totals</b>	<b>10</b>	<b>8</b>	<b>0</b>	<b>198</b>	<b>14</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
4	MSE 8111	Advanced Sports Medicine II (UR)	4	2	0	66	5	G
4	MSE 7332	Practicum I	0	0	3	33	1	P/F
		<b>Q4 Totals</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>99</b>	<b>6</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
5	MSE 7311	Professional Practice Topics	1	0	0	11	1	G
5	MSE 8312	Advanced Sports Medicine III (Rehabilitation/Active Care)	2	2	0	44	3	G
5	MSE 8122	Practicum II	0	0	3	33	1	P/F
		<b>Q5 Totals</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>88</b>	<b>5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
6	MSE 8211	Sports Performance Enhancement	3	2	0	55	4	G
6	MSE 8222	Practicum III	0	0	3	33	1	P/F
6(5)	BSH 8155	Elective: Biostatistics**	3	0	0	33	3	G
		<b>Q6 Totals</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>88</b>	<b>5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
7	MSE 7321	Sports Nutrition	3	0	0	33	3	G
7	MSE 8322	Practicum IV	0	0	3	33	1	P/F
7	MSE 8332	Capstone Project	1	0	0	11	1	P/F
		<b>Q7 Totals</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>77</b>	<b>5</b>	
		<b>Curriculum Totals</b>	<b>45</b>	<b>27</b>	<b>18</b>	<b>880</b>	<b>60.5*</b>	

\* Includes 22.5 credits from courses offered through the DC program.

\*\* Elective course: Q5 students can be taken either 5<sup>th</sup> or 6<sup>th</sup> quarter. Highly recommended for students that did not go through UWS DC program.



## MS Sports Medicine Courses offered within the DC Program

Please refer to course descriptions in DC program section.

Qtr.	Course #	Course Name	Credits
6	CHR 6322	NMS Diagnosis and Treatment I Lecture	6.0
6	CHR 6325	NMS Diagnosis and Treatment I Lab	1.0
6	CHR 6329	Biomechanics/Palpation IV Lecture	2.0
6	CHR 6331	Biomechanics/Palpation IV Lab	1.0
7	CHR 7123	NMS Diagnosis and Treatment II Lecture	3.0
7	CHR 7126	NMS Diagnosis and Treatment II Lab	0.5
8	CHR 7227	Soft Tissue Therapies/Rehabilitation II	1.5
8	CHR 7224	NMS Diagnosis and Treatment III Lecture	3.0
8	CHR 7228	NMS Diagnosis and Treatment III Lab	0.5
8	CHR 7265	Chiropractic Physiological Therapeutics II	4.0
Total DC Program Credits			22.5

### Course Descriptions - MS Sports Medicine

The numbers in parentheses following each course description are the number of hours that each class meets per week during a typical 11-week quarter (lecture hours + lab hours). Because many of the practical lab experiences (practicums) include sports competitions and other sporting events, actual clock hours may be greater than listed.

#### MSE 6311 Exercise Physiology (4 credits)

This course focuses on the physiological responses and adaptations to exercise experienced by the neuromuscular, cardiovascular, and thermoregulatory systems of the body. Data measurement and collection takes place in the laboratory component of this course regarding oxygen uptake, body composition, respiration, etc. (3+2)

#### MSE 6550 Sport Psychology (4 credits)

This course involves the application and synthesis of the best evidence-based practices in sport psychology that have been shown to result in optimal performance, health, and satisfaction. Students will be introduced to the most effective science based theories, research, and best practices in sport psychology. The course experience will focus on the necessary link between science and sport, encouraging each student to build the bridge from concept to integrated application in real world settings. (4+0)

#### MSE 7131 Special Populations (1 credit)

This seminar program focuses on the evaluation and management of the needs of athletes with special considerations such as disabled Master's level and female athletes and those with chronic disorders like asthma and diabetes. Included in this course is the matching of physical activities with the physical abilities and corrective needs of these athletes. (1+0)

#### MSE 7151 Emergency Management (3 credits)

This course prepares the student to handle emergency situations that arise with athletes during exercise or sporting events, such as cessation of breathing or circulation, shock, concussion, and spinal injuries. Students will learn to assess critical injuries and illnesses, follow procedures for providing care, and implement guidelines that affect decisions for allowing athletes to continue with activity. Students will also be informed of practical information regarding the benefits of sport-specific protective gear and how to properly fit equipment to sports participants including age-appropriate gear and the ergonomic theory behind such equipment. In addition to selection and fit, students will focus on the emergency removal of general protective and sport-specific protective athletic equipment. (2+2)

#### MSE 7211 Advanced Sports Medicine I (lower region) (5 credits)

This course focuses on the evaluation and management, including acute care, rehabilitation, and prevention, of injuries and disorders of the pelvis, hip, thigh, knee, calf, ankle and foot. (4+2)

#### MSE 7311 Professional Practice (1 credit)

In this course students explore issues regarding ethics and jurisprudence associated with working with athletes, as well as how to communicate with other members of the athlete's "team" of stakeholders. Students learn how to establish a sports injuries and rehabilitation practice. (1+0)

#### MSE 7321 Sports Nutrition (3 credits)

This course focuses on the dietary needs for physical activity and peak performance with a focus on nutritional assessment, metabolism, and use of supplements and botanicals in the management of sports injuries. In addition, intentional and non-

intentional abuses of supplements and related compounds, and food/supplement interaction with regard to drug tests commonly mandated in the athletic competitions are discussed. (3+0)

**MSE 8111 Advanced Sports Medicine II (upper region) (5 credits)**

This course focuses on the evaluation and management, including acute care, rehabilitation, and prevention, of injuries and disorders of the cervical and thoracic spine, shoulder, arm, elbow, forearm, wrist and hand. (4+2)

**MSE 8211 Sports Performance Enhancement (4 credits)**

This course focuses on assessing the needs of the athletes who want to improve performance in strength, flexibility, speed, agility, etc., and the creation, implementation and monitoring of plans for achieving those goals. (3+2)

**MSE 8312 Advanced Sports Medicine III (Rehabilitation/Active Care) (3 credits)**

This course provides the knowledge of evidence based chiropractic care and rehabilitation. This class will focus on the role of rehabilitation and exercise on patient care and management. It will include a brief overview of muscle functions during movements, faulty/normal patterns of movements, functional exams, patient presentations, learning the clinical audit process, rehabilitation protocols, and reading research articles. Students will gain a detailed understanding of practical applications of various rehabilitation techniques and exercises used in daily practice. (2+2)

**MSE 7332 Practicum I**

**MSE 8122 Practicum II**

**MSE 8222 Practicum III**

**MSE 8322 Practicum IV (1 credit each; 4 credits total)**

This is a series of four field-based practicums in which students participate in the evaluation and management of athletes. The required practicum hours are achieved through a variety of clinical experiences in physician offices, rehabilitation clinics, and sports performance laboratories as well as through participation in sporting events. (0+3)

**MSE 8332 Capstone/Project (1 credit)**

This course requires the student to collaborate with up to two other students in their cohort to produce an original research design suitable for submission to a Human Subjects Review Board (IRB) that demonstrates their mastery of a specified subject that they might endeavor to explore in a scholarly way. Students are not required to actually submit or to complete the research protocol they design, rather this exercise prepare all the necessary information and documentation that would be necessary if they actually intended to do the project. In that context, the project requires the student to select an area of study, review and critique the available literature on the subject and to design, on paper, a scientific investigation that would elucidate some previously unknown facet of the topic area. Optimally, the chosen subject will call upon the student to analyze and reflect on their experiences in the program in a scholarly way, including the student's academic achievement, practical experiences, and personal growth throughout the master's program. (1+0)

**BSH 8155 Biostatistics (3 credits)**

This course is an introduction to the principles of epidemiology and their application to sports science. This course addresses the role of epidemiology in investigating sports injuries and other factors in sports performance. The course also stresses clinical research design methods utilized in sports science research as well as general clinical research designs such as clinical trials, cohort studies, case-control studies, and other pragmatic designs. This course will also have an emphasis on the analysis and application of the current scientific literature as it relates to sports medicine and sports performance. (3+0)

## **MS/MA Exercise and Sports Science (ESS) Online Concentrations**

The online master's in exercise and sports science programs are designed to provide students with advanced training within a specific area under the umbrella of exercise and sports science. These programs are targeted at students who are currently working in the sports field and desire to further their education or are looking for a way to enter into a new field. There are three concentrations available – each of which begins with a set of common core courses followed by specialty courses that begin around the third academic quarter.

### **Concentrations**

Sports Performance and Coaching Science (MS)

Fitness and Wellness Management (MS)

Sports and Athletic Administration (MA)

The online courses utilize a combination of teaching and learning methods including online lectures, assignments, discussion forums, quizzes and exam, and research papers. A variety of evaluation methods measure student achievement of course and program learning outcomes. The program culminates with a capstone course in which students produce an original paper demonstrating their mastery of a specified subject that they explore in a scholarly way.

### **Admission Requirements - MS/MA-ESS Online Format**

1. Bachelor's degree from a regionally accredited undergraduate institution with a minimum cumulative GPA of 2.75. Applicants with a cumulative GPA below 2.75 will be considered on a case-by-case basis. Such applicants may be required to submit scores from a standardized entrance exam (GRE, MAT or GMAT) completed within the last five years.
2. A personal statement describing the applicant's reasons for pursuing the degree and learning expectations. The personal statement is an important factor in assessing the student's suitability for admission into the graduate degree program.

There are no additional specific entry requirements for the concentrations under the exercise and sports science program, which include:

Sports Performance and Coaching Science (MS)  
Fitness and Wellness Management (MS)  
Sports and Athletic Administration (MA)

### **Technical Standards and Required Abilities for Admission**

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

### **Graduation Requirements - MS/MA-ESS Online**

The MS/MA-ESS is conferred upon the student who has fulfilled the following requirements:

1. Maintenance of enrollment eligibility through satisfactory academic performance, professional development and behavior.
2. Successful completion of all required courses, lectures, labs, practicums, and seminars with a minimum cumulative GPA of 3.0 on all required coursework.
3. Successful completion of minimum graduation requirements as officially communicated to students through the university catalog, student publications, and other official documents of the university.
4. Freedom from all indebtedness and other obligations to the university.

### **Competencies and Expected Learning Outcomes - MS/MA-ESS Online**

#### **Graduates of the MS/MA-ESS program will:**

1. Demonstrate knowledge in the basic sciences, pertinent to the field of exercise and sports science, and be able to apply that knowledge to a practical situation.
2. Develop a research-based project, on a topic of interest within the field of exercise and sports science that is of publication quality and representative of the education received through this program.
3. Consistently utilize evidence-based methods/materials to enhance
4. Demonstrate an understanding of the ethical standards and expectations in the exercise science field/profession and exhibit personal behaviors that exemplify professionalism.
5. Demonstrate knowledge of the importance and impact of physical activity, and nutrition on one's health and be an advocate for developing a physically active lifestyle.

#### **Learning Outcomes for Fitness and Wellness Management:**

In addition to the general learning outcomes above, graduates of the fitness and wellness management track will:

1. Examine and describe how disease and illness can affect various body systems.
2. Develop expertise and demonstrate the ability to promote healthy lifestyles through physical activity, fitness, wellness, and sports.
3. Apply the principles and best practices learned by designing, implementing, and evaluating health promoting activities and programs.
4. Demonstrate the ability to effectively educate and/or counsel individuals regarding lifestyle modification.
5. Successfully respond in a rational, sensitive, and critical thinking manner about values and ethics in the health and wellness field.

**Learning Outcomes for Sports Performance and Coaching Science:**

In addition to the general expected learning outcomes above, graduates of the sports performance and coaching science track will:

1. Demonstrate knowledge and basic skills in the prevention, recognition and evaluation of injuries. Students will be able to recognize acute injuries and work with a sports medicine team to ensure the athlete's optimum health rehabilitation for an injury.
2. Design programs of training, conditioning, and recovery that properly utilize exercise physiology and biomechanical principles.
3. Demonstrate the ability to conduct practices and competitions that enhance the physical, social and emotional growth of the athletes and develop and monitor goals for individual athletes and overall programs.
4. Recognize and integrate a variety of tools available to reduce stress and performance anxiety.
5. Demonstrate organizational and administrative efficiency in implementing sports programs. Students will understand the scope of legal responsibilities that comes with assuming a coaching or sports performance specialist position.
6. Develop reasonable objectives and goals for individuals and teams and determine effective evaluation techniques for athlete motivation, individual performance, and team performance.

**Learning Outcomes for Sports and Athletic Administration:**

In addition to the general expected learning outcomes above, graduates of the sports and athletic administration track will:

1. Demonstrate the ability to analyze problems, devise solutions, develop a plan of action, and evaluate the plan's performance in areas pertinent to the field of sports and athletic administration including: sport communication, college coaching and athletic recruiting, NCAA compliance, fundraising in college athletics, sport law in college athletics, sport business management, and sport marketing.
2. Exhibit leadership skills and an understanding of how to identify and address ethical issues in sport management and administration.
3. Develop a marketing plan for a sport organization being able to defend the accounting, budgeting, and revenue development.
4. Develop effective communication skills with clients, employers, media, and other sport management professionals to be used in the role of an athletic administrator.
5. Critique the legal concepts, issues and concerns as they pertain to sport entities, including but not limited to pertinent state and federal legislation, risk management, tort liability and negligence.

## Curriculum Sequence - MS/MA-ESS Online

Online exercise and sports science students complete core courses consisting of 22 quarter credit hours. After which, they complete an additional 24-32 quarter credits comprised of courses within their chosen degree concentration to fulfill the required total number of credits.

### Core Courses (22 credits)

Qtr.	Course #	ESS Core Courses - Online Programs	Lecture	Clock	Credits	Grade
1	MSE 6520	Leadership/Management in Sports and Athletics	4	44	4	G
1	MSE 6560	Research Procedures in Sports Performance	4	44	4	G
2	MSE 6510	Management of Sports Injuries	3	33	3	G
2	MSE 6530	Sports Nutrition	4	44	4	G
3	MSE 6550	Sport Psychology	4	44	4	G
6/7	MSE 6570	Capstone Project	3	33	3	G
<b>Totals</b>			<b>22</b>	<b>242</b>	<b>22</b>	

### ESS Online Concentrations:

Qtr.	Course #	Sports Performance and Coaching Science	Lecture	Clock	Credits	Grade
3	MSE 6500	Exercise Physiology	4	44	4	G
4	MSE 6540	Sports Performance Enhancement	4	44	4	G
4	MSP 7140	Positive Coaching Pedagogy	4	44	4	G
5	MSP 7100	Seminar for Sports Performance and Coaching Science	4	44	4	G
5	MSE 6115	Psychological Preparation and Mental Skills Training	4	44	4	G
6	MSE 6120	Legal Issues in Sports	4	44	4	G
6		Elective - Choose one from list below	4	44	4	G
7		Elective - Choose one from list below	4	44	4	G
<b>Totals</b>			<b>32</b>	<b>352</b>	<b>32</b>	
Qtr.	Course #	Elective Choices (Choose 2)	Lecture	Clock	Credits	Grade
	MSP 8100	Skill Acquisition and Human Performance	4	44	4	G
	MSF 7245	Athletic Nutrition Planning & Supplements	4	44	4	G
	MSP 8120	Professional Field Experience*	0	132	4	P/F

\*Professional Field Experience is a hands-on experience rather than lecture course.

Qtr.	Course #	Fitness and Wellness Management	Lecture	Clock	Credits	Grade
3		Elective option	4	44	4	G
4	MSF 7200	Advances in Health and Wellness	4	44	4	G
4		Elective option	4	44	4	G
5	MSF 7230	Health Across the Lifespan	4	44	4	G
5	MSF 7250	Epidemiology in Health and Wellness	4	44	4	G
6	MSF 7210	Applied Health Behavior Theory	4	44	4	G
6	MSF 7220	Wellness and Health Promotion Technique	4	44	4	G
7	MSF 7245	Athletic Nutrition Planning & Supplements	4	44	4	G
			<b>32</b>	<b>352</b>	<b>32</b>	
Qtr.	Course #	Elective Choices (Choose 2)	Lecture	Clock	Credits	Grade
	MSE 6500	Exercise Physiology	4	44	4	G
	MSE 6540	Sports Performance Enhancement	4	44	4	G
	MSP 7140	Positive Coaching Pedagogy	4	44	4	G
	MSP 8120	Professional Field Experience*	0	132	4	P/F

Qtr.	Course #	Sports and Athletic Administration	Lecture	Clock	Credits	Grade
3		Elective option	4	44	4	G
4	MSA 7310	Financial Issues in Sports and Athletic Administration	4	44	4	G
4		Elective option	4	44	4	G

5	MSA 7300	Sports Facilities and Event Planning	4	44	4	G
5		Elective option	4	44	4	G
6	MSE 6120	Legal Issues in Sports	4	44	4	G
<b>Totals</b>			<b>24</b>	<b>264</b>	<b>24</b>	
<b>Qtr.</b>	<b>Course #</b>	<b>Elective Choices (Choose 3)</b>	<b>Lecture</b>	<b>Clock</b>	<b>Credits</b>	<b>Grade</b>
	MSA 8300	Marketing Principles in Sports and Athletics	4	44	4	G
	MSA 8310	Communications in Sports	4	44	4	G
	MSE 6500	Exercise Physiology	4	44	4	G
	MSE 6540	Sports Performance Enhancement	4	44	4	G
	MSP 7140	Positive Coaching Pedagogy	4	44	4	G
	MSP 8120	Professional Field Experience	0	132	4	P/F

## Course Descriptions - Exercise and Sports Science Core Courses

The numbers in parentheses following each course description are the hours that each class meets per week (lecture + lab hours).

### **MSE 6510 Management of Sports Injuries (3 credits)**

This course focuses on the recognition and immediate management of common medical conditions/emergencies that may be encountered on the field/at sporting events. It also focuses on understanding and proper application of commonly used emergency techniques such as basic life support, splinting, bandaging, wound care, and dislocation reduction. (3+0)

### **MSE 6520 Leadership/Management in Sports and Athletics (4 credits)**

An examination of the human dynamics in sport organizations and how athletic directors, sport leaders, and human resource management can affect sport organizational effectiveness. Emphasis will be given to positive leadership and management practices and how leadership theory can explain the evolution of a strong mission, strategic plan, and the cultivation of human resources. The course will also examine differences in administration for different sports settings such as youth, high school, collegiate, and others. (4+0)

### **MSE 6530 Sports Nutrition (4 credits)**

This course will cover the relationship between macronutrient and micronutrient intakes and athletic performance. Detailed knowledge of how exercise influences dietary intake, digestion, absorption, energy metabolism, and storage of nutrients will be discussed. In addition, dietary planning for weight gain and weight loss, sport specific concerns and conditions that present to athletes of all age groups regarding nutrition, and the use of dietary supplements as ergogenic aids will be explored. (4+0)

### **MSE 6550 Sport Psychology (4 credits)**

This course involves the application and synthesis of the best evidence-based practices in sport psychology that have been shown to result in optimal performance, health, and satisfaction. Students will be introduced to the most effective science based theories, research, and best practices in sport psychology. The course experience will focus on the necessary link between science and sport, encouraging each student to build the bridge from concept to integrated application in real world settings. (4+0)

### **MSE 6560 Research Procedures in Sports Performance (4 credits)**

This course will explore research topics in the disciplines of sport science, understand how research methods can be utilized to form theories, learn how to critically review the published literature, and write a comprehensive literature review that can be incorporated into the Capstone Project requirement. (4+0)

### **MSE 6570 Capstone Project (3 credits)**

This course requires the student to produce an original paper demonstrating their mastery of a specified subject that they endeavor to explore in a scholarly way. One example is creating a "portfolio" analysis paper. This project would require the student to analyze and reflect on their practicum experiences in a scholarly way, including the student's academic achievement, practical experiences, and personal growth throughout the master's program. These reflections should include a critical self-appraisal on clinical experiences that demonstrate mastery of professional skills in the assessment and management of sports injuries and in exercise prescription. Other acceptable scholarly work may include case studies, review of literature or original research projects including surveys, comparisons of procedures, etc. (3+0)

## Course Descriptions - Sports Performance and Coaching Science

### **MSE 6500 Exercise Physiology (4 credits)**

This course focuses on the physiological responses and adaptations to exercise experienced by the cardiovascular, thermoregulatory, and neuromuscular systems of the body. The laboratory component of this course will include methods of data collection and measurement relating to energy expenditure, maximal oxygen consumption, onset of blood lactate, electrocardiography, and other selected measures. (4+0) Prerequisite = prior Physiology coursework (or instructor approval)

### **MSE 6540 Sports Performance Enhancement (4 credits)**

This course is designed to provide students with the ability to assess and prescribe anaerobic and aerobic exercise programs for sports performance enhancement. Students will obtain hands-on experience designing programs to meet the needs of athletes from a variety of sports. (4+0) Prerequisite = Exercise Physiology

### **MSE 6115 Psychological Preparation and Mental Skills Training (4 credits)**

The intent of this course is to produce behavior and knowledge changes in athletes/players so they proceed with their performance in a more effective and decisive manner. The topics selected are relevant and engaging and will challenge participants to analyze their current philosophies and beliefs. (4+0)

### **MSE 6120 Legal Issues in Sports: (4 credits)**

This course introduces legal matters that confront contemporary organized athletics and sports management. Specific topics include impact of antitrust laws; personal services contracts; labor law; injury and liability; franchise and transfer rules, and tax aspects. The course examines the role of legal services within sports organizations and in individual athlete representation. (4+0)

### **MSP 7100 Seminar for Sports Performance and Coaching Science (4 credits)**

This course is designed to provide students with an overview of the major issues in sports performance and coaching. Primary issues impacting contemporary sports coaching and performance training are covered, including performance-enhancing drugs; human growth hormones; gender inequity; race and ethnicity; youth, adolescent, and adult programs; media involvement; economics; management structures; and globalization. (4+0)

### **MSP 7140 Positive Coaching Pedagogy (4 credits)**

This course will apply the principles of positive coaching to increase effectiveness and improve performance in the areas of sport, exercise and wellness. Students will recognize and learn to communicate evidence-based positive coaching principles to: strive for excellence; achieve optimal performance; teach and model the process of success; lead a group to becoming a highly effective team; communicate with followers as we would wish to be communicated with by our leaders; respecting and protecting self-worth of everyone; practice how to be demanding without being demeaning; and how to shape an individual's will without breaking their spirit. (4+0)

## Course Descriptions - Fitness and Wellness Management

### **MSF 7200 Advances in Health and Wellness (4 credits)**

This course should familiarize the student with the history of the field of wellness, health education, and health promotion. The *Healthy People* initiative and its goals are discussed as well as priority areas. Current risk factors in preventable causes of death along with guidelines for risk reduction in the areas of diet, exercise and lifestyle are also taught. In addition, concepts needed to identify community needs, frame health promotion interventions, implement and evaluate those programs will be presented in order to provide the student with the necessary background for future courses in the MS program. (4+0)

### **MSF 7210 Applied Health Behavioral Theory: (4 credits)**

This course will consist of a careful review of the theories of health behavior. Emphasis is placed on how health behavior theory can explain health behavior and assist in program design. Case-study examples of how health behavioral theory has been successfully used in school, community, athletic, medical and worksite wellness settings for health promotion interventions will be investigated. (4+0)

### **MSF 7220 Wellness and Health Promotion Techniques (4 credits)**

An examination of various techniques used to deliver effective health education and promotion programs to a variety of audiences. The relationship of the design of health promotion programs to the needs assessment process will be discussed, as will methods of health communication. Examples of successful interventions in school, community, healthcare and worksite settings will be covered as well as techniques specific for each level of design and implementation. (4+0)

### **MSF 7230 Health Across the Lifespan (4 credits)**

This course covers the basic principles guiding growth, development and the health of individuals across the lifespan, from the prenatal period through senescence. Presents methodological, conceptual and substantive issues necessary for



understanding and evaluating empirically based information about growth, development and health at different stages of life and from different academic perspectives. Course covers several themes, including contributions of biological and environmental factors to health and human development, measuring the health of individuals in communities, understanding determinants and consequences of health and development across the lifespan, measuring population health and assessing the implications of health disparities. (4+0)

**MSF 7245 Athletic Nutrition Planning and Supplements (4 credits)**

This course involves the detailed study of improving and supporting athletic performance through nutrition. How exercise influences dietary intake, digestion, absorption, energy metabolism, and storage of nutrients will be thoroughly discussed. Students will gain practical experience in supporting body composition and physique changes for specific sports/positions as well as performance optimization in endurance, power and speed applications. Nutrition principles and aspects such as meal timing, the use of sports supplements and ergogenic aids will be discussed in detail. The relationship of nutrition to circadian rhythms and sleep to support recovery will also be examined. (4+0)

**MSF 7250 Epidemiology in Health and Wellness (4 credits)**

Epidemiology is the study of health within or among populations. This course will explore the basic concepts of epidemiology as they pertain to us and understanding for those developing and planning wellness or health promotion programs. Types of health research methods will be covered as well the basic indicators of population health and the influences that behavior and lifestyle can have on those indicators. (4+0)

## **Course Descriptions - Sports and Athletic Administration (MA)**

**MSA 7300 Sports Facilities and Event Planning (4 credits)**

This course examines the sport facility lifecycle concepts of strategic planning, design-development, construction delivery systems, financing, and operations. Students will discuss the development of a case statement and request for proposal for various sport facilities including: a private sports club, an interscholastic, intercollegiate, or professional sport programs, or a recreational enterprise. (4+0)

**MSA 7310 Financial Issues in Sports and Athletic Administration (4 credits)**

This course integrates the theories of finance, economics and accounting in various sport business industry segments. Students will study the diverse forms of sport ownership, taxation, financial analysis, feasibility and economic impact statements. Advanced topics include organizational budgets, financial strategies, and labor economics. Students will examine financials documents of professional sport franchises, collegiate sport programs, and past Olympiads. (4+0)

**MSE 6120 Legal Issues in Sports (4 credits)**

This course surveys the various applications of contract, tort, intellectual property, constitutional, and administrative laws to the growing and complex field of sport management with a perspective toward risk management (including issues of discrimination with regard to race, sex, and disability). Topics include contract negotiation, product liability, professional and collegiate leagues, and marketing design and develop strategies for limiting liability. (4+0)

## **Course Descriptions - Elective Options**

**MSE 6500 Exercise Physiology (4 credits)**

This course focuses on the physiological responses and adaptations to exercise experienced by the cardiovascular, thermoregulatory, and neuromuscular systems of the body. The laboratory component of this course will include methods of data collection and measurement relating to energy expenditure, maximal oxygen consumption, onset of blood lactate, electrocardiography, and other selected measures. (4+0) Prerequisite = prior Physiology coursework (or instructor approval)

**MSE 6540 Sports Performance Enhancement (4 credits)**

This course is designed to provide students with the ability to assess and prescribe anaerobic and aerobic exercise programs for sports performance enhancement. Students will obtain hands-on experience designing programs to meet the needs of athletes from a variety of sports. (4+0) Prerequisite = Exercise Physiology

**MSF 7425 Athletic Nutrition Planning and Supplements (4 credits)**

This course involves the detailed study of improving and supporting athletic performance through nutrition. How exercise influences dietary intake, digestion, absorption, energy metabolism, and storage of nutrients will be thoroughly discussed. Students will gain practical experience in supporting body composition and physique changes for specific sports/positions as well as performance optimization in endurance, power and speed applications. Nutrition principles and aspects such as meal timing, the use of sports supplements and ergogenic aids will be discussed in detail. The relationship of nutrition to circadian rhythms and sleep to support recovery will also be examined. (4+0)

**MSP 7140 Positive Coaching Pedagogy (4 credits)**

This course will apply the principles of positive coaching to increase effectiveness and improve performance in the areas of sport, exercise and wellness. Students will recognize and learn to communicate evidence-based positive coaching principles to: strive for excellence; achieve optimal performance; teach and model the process of success; lead a group to becoming a highly effective team; communicate with followers as we would wish to be communicated with by our leaders; respecting and protecting self-worth of everyone; practice how to be demanding without being demeaning; and how to shape an individual's will without breaking their spirit. (4+0)

**MSP 8100 Skill Acquisition and Human Performance: (4 credits)**

This course examines the acquisition of skills and human performance from the perspectives of motor learning, cognitive learning, and affective learning. Students are allowed to select sports coaching readings from a preselected reading list in order to complete a series of reports. These sports coaching readings will consist of topics such as leadership, communication, management, skill acquisition, and risk management. The focus of this course is to enhance the student's knowledge concerning the profession of sports coaching. (4+0)

**MSP 8120 Professional Field Experiences: (4-8 credits)**

Practical learning opportunities will take place outside the classroom. The program director will contact organizations of interest with individual students to successfully undertake, implement, and complete a timely industry-specific internship under the supervision of an internship advisor. These organizations encompass the professional, amateur, corporate/agency, municipal, and non-profit sectors of the sports industry. (0+4)

**MSA 8300 Marketing Principles in Sports and Athletics (4 credits)**

Students will explore the science of the marketing mix as product, place, promotion, public relations, and price to understand the marketing of sport as a unique enterprise. The relationship between sport and consumer behavior will be examined. In addition, this course aims to examine the use of athletes and sports as powerful selling tools for non-sport products and services. Students will also develop their own marketing plan in the sport industry segment of their choice. (4+0)

**MSA 8310 Communications in Sports (4 credits)**

This course examines sport communications from many perspectives and provides students with an awareness of the profession, its role in the industry, and an examination of the skills it takes to succeed. Topics covered include the role of print media and electronic media (e.g., radio, television and the Internet) in increasing the prominence of college and professional sport. Students will learn about the roles of media planners, producers, sports information directors, sports journalists, etc. that are involved in the propagation of commercialized sport. (4+0)

## **Master of Science - Sport and Performance Psychology**

The sport and performance psychology degree is designed to offer advanced training for leaders in coaching, counseling, education, health care, business and administration. Using positive psychology and the applied sport psychology scientist-practitioner model of training, our program is designed to help you develop the mental essentials to take your performance and the performance of others to the next level. The degree is a total of 54 quarter-credits with a core curriculum of 34 quarter-credits and multiple elective options for students to complete their degree. This allows our students to select coursework to meet their individual job and certification needs. Our curriculum is specifically designed to help you complete the specialized coursework requirements to become a certified sport psychology consultant through the Association of Applied Sport Psychology (CC-AASP).

### **Admission Requirements - MS Sport and Performance Psychology**

- A first-professional degree in a field of healthcare that includes the following, or similar, coursework (equivalent to at least 22.5 quarter credits or 16 semester credits):
  - Neuromuscular Diagnosis and Treatment
  - Biomechanics
  - Soft Tissue Therapies/Rehabilitation
  - Physiological Therapeutics
- Students currently enrolled in a first professional healthcare degree program that includes the above coursework:
  - Bachelor's degree
  - Minimum 2.5 GPA in current professional healthcare program
  - 6<sup>th</sup> quarter or 4<sup>th</sup> semester status or above
  - Attend an on-campus informational session or participate in an in-person or telephone interview with the MS-ESS program director or a program instructor.

## Technical Standards and Required Abilities for Admission

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

## Graduation Requirements - MS Sports and Performance Psychology

The MS-ESS Sports Medicine is conferred upon the individual who has fulfilled the following requirements:

6. Seven quarters of resident study as a matriculated, graduate degree seeking student, with a minimum 2.5 grade point average and 60.5 quarter credits applicable to the MS program.
7. Maintenance of enrollment eligibility through satisfactory academic performance, professional development and behavior, and non-academic behavior.
8. Successful completion of all required courses, lectures, labs, practicums, and seminars with a minimum cumulative GPA of 2.75 on all required coursework.
9. Successful completion of minimum graduation requirements as officially communicated to students through the university catalog, student publications, and other official documents of the university.
10. Freedom from all indebtedness and other obligations to the university.

## Competencies and Expected Learning Outcomes - MS Sport and Performance Psychology

1. Describe major concepts and current trends in research pertaining to the field of sport psychology.
2. Identify and explain the legal and ethical issues involved with counseling and sport psychology consulting.
3. Demonstrate the ability to design activities and ethical interventions in sport and performance contexts that will lead to improved performance and satisfaction.
4. Communicate through discussion and writing the terminology, concepts, and connection between science and sport psychology practice.
5. Recognize and integrate a variety of techniques available to enhance performance, improve health, and reduce anxiety and stress by building mental skills such as confidence, concentration and composure.

## Curriculum Sequence - MS Sport and Performance Psychology

Qtr.	Course #	Sport and Performance Psychology	Lecture	Clock	Credits	Grade
1	MSE 6117	Psychology Preparation and Mental Skills Training	4	44	4	G
1	MSE 6560	Research Procedures in Sports Performance	4	44	4	G
2	MSE 6530	Sports Nutrition	4	44	4	G
2	MSE 6505	Professional Practice and Counseling Ethics	4	44	4	G
3	MSE 6550	Sport Psychology	4	44	4	G
3	MSC 7400	Sports in American Society	4	44	4	G
4	MSE 7410	Psychology of Performance Excellence	4	44	4	G
4		Elective Option	4	44	4	G
5		Elective Option	4	44	4	G
5		Elective Option	4	44	4	G
6	MSE 7415	Applied Sport Psychology	4	44	4	G
6		Elective Option	4	44	4	G
7	MSE 6575 MSE 6580	Capstone Project or Cumulative Exam	2	22	2	G
7		Elective Option	4	44	4	G
<b>Totals</b>			<b>34</b>	<b>374</b>	<b>34</b>	
Qtr.	Course #	Elective Choices; need minimum of 20 credits	Lecture	Clock	Credits	Grade
	MSE 6510	Management of Sports Injuries	3	33	3	G
	MSE 6500	Exercise Physiology	4	44	4	G
	MSE 6540	Sports Performance Enhancement	4	44	4	G
	MSC 7525	Life Planning and Career Counseling	4	44	4	G
	MSC 7440	Applied Motor Learning	4	44	4	G
	MSE 6520	Leadership/Management in Sports and Athletics	4	44	4	G
	MSP 7130	Positive Coaching Pedagogy	4	44	4	G
	MSP 7100	Seminar for Sports Performance and Coaching Science	4	44	4	G
	MSE 6536	Foundation of Counseling Theories	4	44	4	G

	MSP 8100	Skill Acquisition and Human Performance	4	44	4	G
	MSF 7210	Applied Health Behavior Theory	4	44	4	G
	MSA 8310	Communications in Sports	4	44	4	G
	MSC 8400	Psychopharmacology	4	44	4	G
	MSC 8420	Psychopathology: Diagnosis and Treatment	4	44	4	G
	MSC 8440	Directed Study in Sport & Performance Psychology	1-4	11-44	1-4	G

## Course Descriptions - Sport and Performance Psychology

### Core courses (34 total quarter credits)

#### **MSE6560 Research Procedures in Sports Performance: (4 credits)**

This course will explore research topics in the disciplines of sport science, understand how research methods can be utilized to form theories, learn how to critically review the published literature, and write a comprehensive literature review that can be incorporated into the Capstone/Portfolio requirement.

#### **MSE7410 Psychology of Performance Excellence: (4 credits)**

The purpose of this course is to examine the theories, research, and intervention strategies related to the pursuit of excellence. This course explores the deliberate interventions necessary to support the development of excellence and expertise. Students will learn the nature of expertise development, the necessary steps to achieve excellence, and common roadblocks. The concept of excellence will be investigated in many contexts, such as sport & performance, intrapersonal, relationships, and life in general. Topics to be explored include: happiness, contentment, life satisfaction, values, character strengths, emotional intelligence, optimism, hope, flow, and resiliency.

#### **MSC7400 Sports in American Society: (4 credits)**

This course will examine the influence of the social context on sport. Attention given to the influence of society on sport as an institution and the role of sport as an agent of social change. Examines how sport affects the social world we live in. Topics explored include the intersection of sport and: gender, race/ethnicity/culture, socioeconomic class, media relations, violence, deviance, and sexuality.

#### **MSE6530 Sports Nutrition: (4 credits)**

This course will cover the relationship between macronutrient and micronutrient intakes and athletic performance. Detailed knowledge of how exercise influences dietary intake, digestion, absorption, energy metabolism, and storage of nutrients will be discussed. In addition, dietary planning for weight gain and weight loss, sport specific concerns and conditions that present to athletes of all age groups regarding nutrition, and the use of dietary supplements as ergogenic aids will be explored.

#### **MSE6550 Sport Psychology: (4 credits)**

This course involves the application and synthesis of the best evidence-based practices in sport psychology that have been shown to result in optimal performance, health, and satisfaction. Students will be introduced to the most effective science based theories, research, and best practices in sport psychology. The course experience will focus on the necessary link between science and sport, encouraging each student to build the bridge from concept to integrated application in real world settings.

#### **MSE7415 Applied Sport Psychology: (4 credits)**

This course integrates and synthesizes the theoretical concepts of sport & performance psychology into meaningful application. Strategies, knowledge and skills will be presented to develop the student's ability to create performance-enhancement programs for athletes and performers. A case study approach will be employed.

#### **MSE6505 Professional Practice and Counseling Ethics: (4 credits)**

Students will learn and evaluate current legal and ethical guidelines used in the counseling profession and in sport psychology consulting. Students will be expected to apply ethical decision-making models and formulate effective evidence-based collaborative strategies used to resolve ethical dilemmas and legal issues that arise when working with individuals, organizations, and teams. The focus is on ethical decision-making through an understanding of legal and ethical standards of practice.

#### **MSE6117 Psychological Preparation and Mental Skills Training: (4 credits)**

This course will examine how to help individuals better identify, understand, and manage their mental skills, responses to stress, performance preparation strategies, and focusing techniques designed to help performers be more effectively under pressure. Topics to be covered include positive self-talk, confidence, concentration, motivation and goal setting, peak performance states, self-regulation techniques to control arousal, and coping strategies for dealing with the multiple demands facing a competitive athlete.

**Capstone Project: (2 credits) (choose this or Cumulative Exam)**

This course requires the student to collaborate with up to two other students in their cohort to produce an original research design suitable for submission to a Human Subjects Review Board (IRB) that demonstrates their mastery of a specified subject that they might endeavor to explore in a scholarly way. Students are not required to actually submit or to complete the research protocol they design rather this exercise prepares all the necessary information and documentation that would be necessary if they actually intended to do the project. In that context, the project requires the student to select an area of study, review and critique the available literature on the subject and to design, on paper, a scientific investigation that would elucidate some previously unknown facet of the topic area. Optimally, the chosen subject will call upon the student to analyze and reflect on their experiences in the program in a scholarly way, including the student's academic achievement, practical experiences, and personal growth throughout the master's program.

**MSE6580/MSE6575 Cumulative Exam/Portfolio: (2 credits) (Choose this or Capstone Project)**

**Elective courses (students must complete a minimum of 20 quarter credits)**

**MSE6536 Foundations of Counseling: (4 credits)**

This course will introduce basic counseling theories and review major contemporary counseling theories, models, procedures, and the helping relationship. The relationship between specific theories, counseling techniques, interventions, and applications of research findings in counseling will be analyzed. This course surveys the principles underlying individual, group, organizational, family systems, and multicultural approaches to counseling. The course will discuss counseling methods utilized in both individual and group settings.

**MSC7525 Life Planning and Career Counseling: (4 credits)**

Students develop foundational lifestyle and counseling skills and engage in professional career counseling activities. Students examine the major models of career development and the ways clients' interests, aptitudes, lifestyle, social interests, family responsibilities, and life transitions may impact lifestyle and career development process. Students also discuss legal and ethical issues associated with career counseling practice.

**MSE6500 Exercise Physiology: (4 credits)**

This course focuses on the physiological responses and adaptations to exercise experienced by the cardiovascular, thermoregulatory, and neuromuscular systems of the body. The laboratory component of this course will include methods of data collection and measurement relating to energy expenditure, maximal oxygen consumption, onset of blood lactate, electrocardiography, and other selected measures. \*Prerequisite: prior Physiology coursework (or instructor approval).

**MSE6540 Sports Performance Enhancement: (4 credits)**

This course is designed to provide students with the ability to assess and prescribe anaerobic and aerobic exercise programs for sports performance enhancement. Students will obtain hands-on experience designing programs to meet the needs of athletes from a variety of sports. \*Prerequisite: Exercise Physiology

**MSC7440 Applied Motor Learning: (4 credits)**

This course identifies the various ways that people learn to move and how the principles of motor performance and learning can be useful to those in teaching, coaching, and consultant positions. This course takes an applied approach to understanding motor control, motor development, and motor learning. Emphasis is given to understanding how skilled movement is gained, regulated, and adapted. Students will learn the factors that influence skill acquisition and how to design effective practices for consistent performance.

**MSP 7130 Positive Coaching Pedagogy: (4 credits)**

This course will apply the principles of positive coaching to increase effectiveness and improve performance in the areas of sport, exercise and wellness. Students will recognize and learn to communicate evidence-based positive coaching principles to: strive for excellence; achieve optimal performance; teach and model the process of success; lead a group to becoming a highly effective team; communicate with followers as we would wish to be communicated with by our leaders; respecting and protecting self-worth of everyone; practice how to be demanding without being demeaning; and how to shape an individual's will without breaking their spirit.

**MSE6510 Management of Sports Injuries: (3 credits)**

This course focuses on the recognition and immediate management of common medical conditions/emergencies that may be encountered on the field/at sporting events. It also focuses on understanding and proper application of commonly used emergency techniques such as basic life support, splinting, bandaging, wound care, and dislocation reduction.

**MSC8400 Psychopharmacology: (4 credits)**

This course provides an understanding of the basic classifications, indications, and contraindications of commonly prescribed psychopharmacological medications for the purpose of identifying effective dosages and side effects of such medications.

Topics include neuropharmacology, pharmacokinetics, and pharmacodynamics. A review of different classes of psychoactive compounds, including drugs used in the treatment of psychiatric disorders, will be examined.

**MSC8420 Psychopathology: Diagnosis and Treatment (4 credits)**

Students will examine psychopathology principles, professional literature, and current issues associated with assessing and treating mental disorders. Students will critically evaluate diagnostic models, methods, and approaches used in diagnosing and treating individuals and groups. Students will also explore the current DSM classifications and diagnostic issues associated with diverse populations.

**MSP7100 Seminar for Sports Performance and Coaching Science: (4 credits)**

This course is designed to provide students with an overview of the major issues in sports performance and coaching. Primary issues impacting contemporary sports coaching and performance training are covered, including performance-enhancing drugs; human growth hormones; gender inequity; race and ethnicity; youth, adolescent, and adult programs; media involvement; economics; management structures; and globalization.

**MSP8100 Skill Acquisition and Human Performance: (4 credits)**

This course examines the acquisition of skills and human performance from the perspectives of motor learning, cognitive learning, and affective learning. Students are allowed to select sports coaching readings from a preselected reading list in order to complete a series of reports. These sports coaching readings will consist of topics such as leadership, communication, management, skill acquisition, and risk management. The focus of this course is to enhance the student's knowledge concerning the profession of sports coaching.

**MSE6520 Leadership/Management in Sports and Athletics: (4 credits)**

An examination of the human dynamics in sport organizations and how athletic directors, sport leaders, and human resource management can affect sport organizational effectiveness. Emphasis will be given to positive leadership and management practices and how leadership theory can explain the evolution of a strong mission, strategic plan, and the cultivation of human resources. The course will also examine differences in administration for different sports settings such as youth, high school, collegiate, and others.

**MSF7210 Applied Health Behavioral Theory: (4 credits)**

This course will consist of a careful review of the theories of health behavior. Emphasis is placed on how health behavior theory can explain health behavior and assist in program design. Case-study examples of how health behavioral theory has been successfully used in school, community, athletic, medical and worksite wellness settings for health promotion interventions will be investigated.

**MSA8310 Communications in Sport: (4 credits)**

This course examines sport communications from many perspectives and provides students with an awareness of the profession, its role in the industry, and an examination of the positive communication skills it takes to succeed. Topics covered include the role of print media and electronic media (e.g., radio, television and the Internet) in increasing the prominence of college and professional sport. Students will learn about the roles of media planners, producers, sports information directors, sports journalists, etc. that are involved in the propagation of commercialized sport.

**MSC 8440 Directed Study in Sport & Performance Psychology: (1-4 credits)**

Field problems/directed study courses are taught to increase the scope of the program and to give students special opportunities to complete advanced research and projects. With instructor approval to register for the course, students must complete the UWS course contract for field problems/directed study form. This form is to be filled out by the student and must be approved by the instructor and program director prior to enrollment. Policy: A contractual agreement for credit hours must be equivalent to the standard unit of credit as declared by the Northwest Commission on Colleges and Universities. "One credit hour will be awarded for a course meeting one hour per week for 11 weeks, exclusive of enrollment, orientation and vacation time. Organized examination days may be counted as instructional days." In addition, the university expects two hours of study outside of class for each instructional hour.

# Certificate of Advanced Study Programs

Certificate of Advanced Study (CAS) in:

- Athletic Administration
- Applied Sport Psychology
- Wellness Coaching
- Sports Nutrition

## Admission - CAS Programs

UWS admits new students into the certificate of advanced study programs each fall (October), winter (January), and spring (April).

The application packet includes a list of the material that must be submitted for official consideration of an applicant's file. Applicants should carefully review the program's selection criteria to ensure that they are making the best possible presentation of their qualifications.

The [application](#) for admission and additional information is available on the UWS website.



# Master of Science Human Nutrition and Functional Medicine - MS-HNFM

## Mission

The mission of the UWS master's in human nutrition and functional medicine program is to prepare learners to serve as outstanding healthcare clinicians, consultants, educators, administrators, and researchers in the field of human nutrition and functional medicine.

## About the Program

Functional medicine is a science-based health care field that focuses on assessment and management strategies to improve, maximize, and/or restore a patient's physiological, emotional/psychological, and physical health. The discipline takes a patient-centered approach to the clinical management of complex, chronic disorders that recognizes the interconnectedness of the physiological factors that influence health and contribute to the progression of disease. The core competencies of functional medicine are based on an understanding of the principles of molecular medicine and nutritional biochemistry as applied in a clinical setting. Functional medicine is discipline-blind and can be incorporated into patient management approaches rendered by medical physicians, chiropractic physicians, naturopathic physicians, nutritionists, nurse practitioners, and other healthcare practitioners.

The MS in human nutrition and functional medicine (MS-HNFM) focuses on the clinical management of chronic illnesses and conditions as the framework for presenting the nutrition subject materials. Students are provided effective, patient-centered management strategies by which to address the myriad of clinical disorders commonly manifest in the current health care system population. This approach allows training to occur in the same context the practitioner will be applying the knowledge. The required coursework combines traditional nutrition science courses with coursework based on the clinical application of functional medicine.

The MS-HNFM program consists of 50 quarter credits provided online. This allows healthcare practitioners to enroll in the program without having to sacrifice time from their clinical practices. The courses are offered with sufficient frequency to allow students to progress with flexibility in scheduling the number of credits they take each term.

## Admission - MS Human Nutrition and Functional Medicine

UWS admits new students into the MS Program each fall (October) and spring (April).

The application packet includes a list of the material that must be submitted for official consideration of an applicant's file. Applicants should carefully review the program's selection criteria to ensure that they are making the best possible presentation of their qualifications.

The [application](#) for admission is available on the UWS website.

## Specific Admission Requirements - MS-HNFM

- Prior college coursework in biology (minimum 3 semester credits or 4 quarter credits), physiology or anatomy/physiology (minimum 3 semester credits or 4 quarter credits), and biochemistry or organic chemistry (minimum 3 semester credits or 4 quarter credits) are required.
- Applicants who meet the entry requirements, but do not hold a degree in a healthcare field, must have completed courses in medical terminology (minimum 2 semester credits or 3 quarter credits) and basic nutrition (minimum 3 semester credits or 4 quarter credits).
- An in-person or telephone interview with the MS-HNFM director or a program instructor.

## Technical Standards

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in their respective course of study. Applicants should review [Policy 1206 - Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

## Graduation Requirements

The MS-HNFM is conferred upon the individual who has fulfilled the following requirements:

1. Maintenance of enrollment eligibility through satisfactory academic performance, professional development and behavior, and non-academic behavior.

2. Successful completion of all required courses, lectures, labs, practicums, and seminars with a minimum cumulative GPA of 2.75 on all required coursework.
3. Successful completion of minimum graduation requirements as officially communicated to students through the university catalog, student publications, and other official documents of the university.
4. Freedom from all indebtedness and other obligations to the university.

### Competencies and Expected Learning Outcomes - MS-HNFM

Graduates of the MS-HNFM program will:

1. Possess the knowledge and skills to assess individuals for nutritional deficiencies and imbalances and apply evidence-based therapeutic interventions.
2. Bring to their patients and communities a well-informed understanding of the crucial relationship between whole food nutrition, health promotion and disease prevention.
3. Link research findings to the clinical application of the functional medicine model.
4. Engage in life-long learning.
5. Practice according to ethical and professional standards.
6. Produce a scholarly paper on an important functional medicine topic and pass the MS-HNFM comprehensive examination.

### Curriculum Sequence - MS-HNFM

Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
1	MSN 6100	Principles of Functional Medicine	5	0	0	55	5	G
1	MSN 6200	Nutritional Biochemistry	2	0	0	22	2	G
Q1 Totals			7	0	0	77	7	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
2	MSN 6101	Evidence-Based Nutrition	3	0	0	33	3	G
2	MSN 6305	Whole Food Nutrition and Supplementation	4	0	0	44	4	G
Q2 Totals			7	0	0	77	7	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
3	MSN 6204	Gastrointestinal Imbalances	4	0	0	44	4	G
3	MSN 6201	Sports Nutrition and Fitness (will be phased into elective course status in 2015-16)*	3	0	0	33	3	G
Q3 Totals			7			77	7	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
4	MSN 6300	Detoxification and Biotransformation Pathways and Imbalances	3	0	0	33	3	G
4	MSN 6302	Hormone and Neurotransmitter Regulation and Imbalances	3	0	0	33	3	G
Q4 Totals			6	0	0	66	6	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
5	MSN 7100	Oxidative/Reductive Dynamics and Energy Production	4	0	0	44	4	G
5	MSN 7200	Immune Imbalances and Inflammation	4	0	0	44	4	G
Q5 Totals			8	0	0	88	8	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
6	MSN 7101	Structural Integrity	2	0	0	22	2	G
6	MSN 7201	Fundamentals of Mind-Body Medicine and The Psychology of Well-being	2	0	0	22	2	G
6	MSN 7207	Nutritional Epidemiology and Clinical Research	4	0	0	44	4	G
Q6 Totals			8	0	0	88	8	
Qtr .	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
7		Elective(s) - Choose from the list of electives below *	4	0	0	44	4	
7	MSN 7205	Final project and comprehensive examination	3	0	0	33	3	P/F
Q7 Totals			7	0	0	77	7	
Curriculum Totals			50	0	0	550	50	

\*Electives - Four credits of electives are required, which may be taken in any quarter.

	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
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MSN 8100	Botanical Medicine	2	0	0	22	2	G
MSN 8101	Nutrition in Special Populations	2	0	0	22	2	G
MSN 8102	Advanced Practices (modules from IFM; each)	2	0	0	22	2	G
MSN 8103	Pharmacology and Drug-Nutrient Interactions	2	0	0	22	2	G
MSN 8105	Functional Medicine for Chronic Hypertension and Metabolic Syndrome (will become required course for students entering April 2015 or later)	2	0	0	22	2	G
MSN 8106	Functional Medicine for Autoimmune Diseases	2	0	0	22	2	G
MSN 8120	Supervised Nutrition Practicum/Preceptorship I	0	0	3	66-335	2	P/F
MSN 8121	Supervised Nutrition Practicum/Preceptorship II	0	0	3	66-335	2	P/F
MSN 8122	Supervised Nutrition Practicum/Preceptorship III	0	0	3	66-335	2	P/F
MSN 8125	Pharmacology and Drug-Nutrient Interactions	2	0	0	22	2	G
MSN 8135	Psychology of Eating and Wellness	2	0	0	22	2	G

## Course Descriptions - MS-Human Nutrition and Functional Medicine

Four core requirement courses provide the foundation for the remainder of the curriculum and must be taken at the beginning of the program. These are: (1) Principles of Functional Medicine, which provides the overview and paradigm for the functional medicine model; (2) Nutritional Biochemistry, which provides the underpinning for the emphasis on biochemical mechanisms seen throughout the program; (3) Evidence-Based Nutrition, which introduces critical appraisal skills and their application in evidence-based nutritional practice; and (4) Whole Food Nutrition and Supplementation, which explores current research and practice developments related to healthy diet and the role of nutritional supplementation.

### MSN 6100 Principles of Functional Medicine (5 credits)

This course presents the fundamental concepts of functional medicine, including genetic predisposition to illness, biochemical individuality, environmental factors (nutrition/diet, xenobiotics, exercise, physical trauma, psychosocial changes), physiologic functions and imbalances, triggers and mediators of illness, common clinical imbalances (oxidative and reductive stress, energy production, structural integrity, assimilation, immune surveillance and inflammation, other defense mechanisms, hormone and neurotransmitter regulation, detoxification and biotransformation, nutritional genomics, and the relationships of mental, emotional and spiritual elements to health and healing). The personalized, whole-person, integrated systems approach of functional medicine will be compared and contrasted to conventional approaches to healthcare. Specialized clinical assessments, diagnostic functional tests and measures/biomarkers of allostatic load will be explored, along with some of the core therapeutic approaches used in many patients. This course lays the foundation for many of the subsequent courses in this degree program and must be taken in the first quarter of the program. (55 hours)

### MSN 6101 Evidence-Based Nutrition (3 credits)

This course provides core knowledge in evidence-based nutrition with a focus on the role of nutrition in health optimization and disease treatment. Students will gain a detailed understanding of the practical application of various nutrients and dietary strategies used in clinical practice. Discussions will also incorporate the three components of evidence-based healthcare (clinical expertise, patient preference, research evidence) into the decision-making and data-analysis process. (33 hours)

### MSN 6200 Nutritional Biochemistry (2 credits)

This course provides an overview of essential concepts in human biochemistry and links those concepts to specific applications in clinical nutrition. The course examines the biological roles of macro- and micronutrients and their metabolism using basic knowledge in physiology, biochemistry and molecular biology. Topics include carbohydrates and energy metabolism, protein and amino acids, bioactive peptides, enzymes, fiber, lipids, the arachidonic acid cascade, minerals, water-soluble and fat-soluble micronutrients, along with an introduction to energy production, reduction-oxidation balance, and biochemical individuality. Students will explore the relationships of nutrients to major health disorders, including cardiovascular disease, diabetes and cancer. (22 hours)

### MSN 6201 Sports Nutrition and Fitness (3 credits)

This course focuses on nutrition considerations and applications in exercise, athletics, performance enhancement, and weight management. Fitness-promoting programs are compared and contrasted, and the evidence supporting various programs is evaluated. Pre-participation guidelines are reviewed. (33 hours)

### MSN 6204 Gastrointestinal Imbalances (4 credits)

This course presents an overview of the metabolism of the gastrointestinal system, with an emphasis placed on the nutritional implications of dysfunctional digestion or absorption, intestinal membrane integrity and permeability, alterations in GI microbiological flora and gut ecology, hepatoenteric cycles, hydrochloric acid and digestive enzymes, assimilation of nutrients, and the GI immune system. Nutritional support of GI function and repair is emphasized. Health disorders reviewed include inflammatory bowel diseases, irritable bowel syndrome, gluten sensitivity, autism, and disorders of systemic inflammation. (44 hours)

**MSN6300 Detoxification and Biotransformation Pathways and Imbalances (3 credits)**

This course examines the metabolic pathways involved in the conversion of exogenous and endogenous toxins and waste compounds and molecules into excretable substances. Phase I and II reactions, regulation of detoxification pathways, genetic variations, and functional assessment of these mechanisms are detailed. Nutritional support and the effect of drugs on detoxification pathways are reviewed, as well as the disturbed physiology and eventual pathology that results from imbalances in detoxification and biotransformation. (33 hours)

**MSN 6302 Hormone and Neurotransmitter Regulation and Imbalances (4 credits)**

This course examines the actions, interrelationships, control mechanisms and imbalances of neurotransmitters, neuroendocrine factors, hormones and immune mediators. Particular emphasis is placed on the hypothalamic-pituitary-adrenal (HPA) axis, thyroid metabolism, and sex hormones. The effects of toxins, free radicals, stress, diet, nutrient deficiencies, digestive disorders, drugs and specific foods on neurotransmitters and hormones are analyzed. Laboratory testing of the various substances, including precursors and metabolites is included. (44 hours)

**MSN 6305 Whole Food Nutrition and Supplementation (4 credits)**

This course covers concepts and evidence related to nutritional therapy, public health nutrition policy, whole foods and processed foods, food groups, dietary patterns, nutrient content of foods, organic and conventional foods, and various controversies in the field of nutrition. Evidence on nutritional prevention and treatment of major diseases is emphasized. Dietary guidelines, meal planning, and regulation and quality control in the dietary supplement industry are also discussed. (44 hours)

**MSN 7100 Oxidative/Reductive Dynamics and Energy Production (4 credits)**

This course examines the mechanisms leading to oxidative or reductive stress and the impact of those reactions on the development of chronic disease. Production of free radical and reactive oxygen species, and the nitric oxide cycle are covered in depth. Mitochondrial dysfunction and other mechanisms of abnormal energy production are reviewed. Relevance to conditions such as neurodegenerative disorders, chronic fatigue, and fibromyalgia will be emphasized. (44 hours)

**MSN 7200 Immune Imbalances and Inflammation (4 credits)**

This course explores inflammation and immune dysfunction as common pathogenic mechanisms in many chronic disorders, such as diabetes mellitus, hypertension, allergy, and autoimmunity. Dietary and (phyto) nutritional influences on the inflammatory process, including both proinflammatory and anti-inflammatory effects, are explored in depth. Case studies include autoimmune diseases, allergies, and metabolic disorders. Risks, benefits, and nutritional interactions associated with common anti-inflammatory medications are reviewed. (44 hours)

**MSN 7101 Structural Integrity (2 credits) \*See note below regarding change of MSN 7101 from required course to elective.**

This course examines the interrelationship between structure, function, well-being and chronic pain syndromes. Structural integrity is considered throughout the spectrum, from cellular membranes and receptors up through neuromusculoskeletal system and whole body structure. Somatovisceral, viscerosomatic, and mind-body interactions are explored. Nutrients closely related to membrane integrity, prostaglandins (and leukotrienes, prostanooids, resolvins, docosatrienes), transport and signaling mechanisms (such as NF-kappaB), fluid dynamics, pain mediation, bone metabolism, and acid-base balance are discussed. Selected orthopedic examination procedures are reviewed so that practitioners can directly assess and treat areas of dysfunction for common pain syndromes; included in this physical assessment is the "nutritional physical" by which clinicians can appreciate physical manifestations of internal imbalances and nutrient insufficiencies. (22 hours)

**MSN 7201 Fundamentals of Mind-Body Medicine and the Psychology of Well-Being (2 credits)**

This course examines the key psychological and psychosocial factors that influence health outcomes. Important concepts in mind-body therapies and mindfulness practices to improve biopsychosocial factors, promote psychophysiological coherence, and influence health outcomes are reviewed. Core concepts of self-esteem (per Nathaniel Branden PhD), the human shadow (per Carl Jung PhD and Robert Bly), shame (per John Bradshaw), clinical psychology (per Jeffrey Kottler PhD), and performance enhancement (per Jim Loehr and Tony Schwartz) are included. (22 hours)

**MSN 7205 Final Project and Comprehensive Examination (3 credits)**

This is the capstone course in the degree program and is taken in the last quarter of study, or the following quarter. Each student, working with a faculty advisor, produces either a case study that includes a narrative report and literature review through which the student demonstrates application of the principles and practices covered in the program, or a substantial paper on a topic related to nutrition and/or functional medicine. Students also write a reflective essay about their learning experiences in the MS-HNFM program. A comprehensive final examination covering all areas of required coursework in the program is taken at the conclusion of this course. (33 hours)

**MSN 7207 Nutritional Epidemiology and Clinical Research (4 credits)**

This course is an introduction to the principles of epidemiology and their application to nutrition. This course addresses the role of nutrition in investigating the epidemiology of many chronic diseases. The course also stresses clinical research design methods utilized in nutrition research as well as general clinical research designs such as clinical trials, cohort studies, case-control studies, and other pragmatic designs. (44 hours)

## Elective Courses

### **MSN 8100 Botanical Medicine (2 credits)**

This course presents a practical overview of medical botany/herbology, including history, composition, safety, and therapeutic use of the most commonly used botanical medicines. Each of these agents is reviewed regarding its classification, bioactive components, herb-drug-nutrient interactions, mechanism of action, metabolism, indications and contraindications, toxicology, methods of administration, and dosage. (22 hours)

### **MSN 8101 Nutrition in Special Populations (2 credits)**

This course looks at nutritional needs and interventions in special populations, such as young children, the elderly, pregnant women, post-surgical patients, patients with terminal illnesses, and disabled persons who may have mental or physical conditions that affect their basic nutritional needs and their ability to utilize food normally. (22 hours)

### **MSN 8102 Advanced Practices (2 credits)**

Modules from IFM; each

### **MSN 8103 Pharmacology and Drug-Nutrient Interactions (2 credits)**

This course provides a practical overview of pharmacologic therapy used in the management of ambulatory patients with chronic illnesses or non-life threatening acute illnesses. The student will study the effects of drugs on organ systems and diseases and the mechanism of action (pharmacodynamics), the absorption, distribution, metabolism and excretion of drugs (A.D.M.E. of pharmacokinetics), potential toxic effects of medications, factors affecting the effectiveness of drugs, and interactions with drugs, botanical compounds, foods, and nutritional supplements. (22 hours)

### **MSN 8105 Functional Medicine for Hypertension and Metabolic Syndrome (2 credits)**

*\*See note below regarding change of MSN 8105 from elective course to required course.*

Obesity, diabetes mellitus type II, and hypertension are epidemic problems in Americanized societies and increasingly worldwide. Approximately 1/3 to 1/2 of Americans are obese and/or diabetic and/or hypertensive. Whereas diabetes and hypertension had previously been found almost exclusively among older adults, these conditions now occur more commonly among children, a trend that indicates clear change in the total environment and directs us away from overemphasis on genetic causes of these conditions. This course specifies the diagnostic criteria, history, physical exam, laboratory assessment, and treatment plans for the related conditions of obesity, diabetes mellitus type two, metabolic syndrome and chronic hypertension. (22 hours)

### **MSN 8106 Functional Medicine for Autoimmune Diseases (2 credits)**

The prevalence of autoimmune diseases is increasing rapidly worldwide and, as with other health ailments such as hypertension and diabetes, these conditions are becoming particularly more common in westernized societies. Rapid changes in disease prevalence point to a change in the patient's environment rather than to genetic causes, to which these conditions have traditionally been ascribed. Likewise, these conditions that were once considered idiopathic have now been described and researched to the extent that we better understand the etiology and pathophysiology of the disease process, allowing us to formulate improved treatment approaches. This course will review the major autoimmune diseases, their unique and common etiologies, laboratory assessments, physical exam findings, and nutritional and integrative interventions, including pharmacologic drugs. (22 hours)

### **MSN 8120 Supervised Nutrition Practicum/Preceptorship I**

### **MSN 8121 Supervised Nutrition Practicum/Preceptorship II**

### **MSN 8122 Supervised Nutrition Practicum/Preceptorship III (2 credits)**

Preceptorships are designed to provide practical experiences to help students explore various career opportunities and/or improve practical knowledge and skills within the field of nutrition. During a preceptorship, students work under the supervision of a credentialed nutritionist or other health care professional in a nutritional practice environment. The university strives to maintain a list of credentialed supervisors throughout the United States. However, students are ultimately responsible for making their own work arrangements. The supervised experience must total at least 66 hours and include experience in each of the following categories: nutritional assessment, intervention, education, counseling or management, and monitoring or evaluation. Optionally, students may extend the preceptorship to 335 hours with a minimum of 70 hours in each of the categories listed above. Only 2 credits will be awarded, no matter how many additional hours above the minimum 66 hours are involved.

### **MSN 8125 Pharmacology and Drug-Nutrient Interactions (2 credits)**

This course provides a practical overview of pharmacologic therapy used in the management of ambulatory patients with chronic illnesses or non-life threatening acute illnesses. The student will study the effects of drugs on organ systems and diseases and the mechanism of action (pharmacodynamics), the absorption, distribution, metabolism and excretion of drugs (A.D.M.E. of pharmacokinetics), potential toxic effects of medications, factors affecting the effectiveness of drugs, and interactions with drugs, botanical compounds, foods, and nutritional supplements.

**MSN 8135 Psychology of Eating and Wellness (2 credits)**

This course explores our complex relationship with food: why we eat what we eat, how we eat, and why we eat too much or too little. Based on positive psychology, mind-body medicine, cognitive-behavior therapy, and a functional medicine model of psychological intervention as paths to wellness, the course also focuses on expectations, beliefs, and resistance to change. Students will examine their own eating and wellness practices, as well as their readiness for counseling others. Therapeutic interventions for developing healthy behaviors and recognizing eating disorders will be discussed and the role of family, peer, societal, corporate, and governmental influences on personal choices will be emphasized. (22 hours)

*\* For students entering the MS-HNFM program in April 2015 and later, Functional Medicine for Chronic Hypertension and Metabolic Syndrome will be a required course and Structural Integrity will be an elective. For students who entered prior to April 2015 and have already taken Structural Integrity as a required course prior to winter 2016, nothing changes. Students who entered prior to April 2015 and have NOT taken Structural Integrity prior to winter 2016 will need to take Functional Medicine for Chronic Hypertension and Metabolic Syndrome as a requirement and will not be required to take the Structural Integrity course. Each course is 2 credits.*

**Graduate Certificate Human Nutrition and Functional Medicine**

Health professionals with master's or first professional degree (DC, MD, DO, ND, LAc, etc.), may enroll in the online graduate certificate in human nutrition and functional medicine. The curriculum includes eight of the 16 required courses in the MS-HNFM program.

Completion of the certificate program qualifies students to take the examinations for a number of certifications in the field of nutrition, including the Certified Nutrition Specialist (CNS) credential. To qualify for the CNS credential, licensed healthcare professionals need to participate in a supervised 1,000-hour nutrition practice experience that is in addition to completing the HNFM certificate program. UWS has designed the optional supervised practice experience courses to meet CNS practice experience requirement. Individuals who enroll in the HNFM certificate program who are not interested in acquiring the CNS credential need not complete any of the optional practice experience courses. Contact the office of admission for further details.

**Admission - Certificate Human Nutrition and Functional Medicine**

UWS admits new students into the graduate certificate program each fall (October) and spring (April).

The application packet includes a list of the material that must be submitted for official consideration of an applicant's file. Applicants should carefully review the program's selection criteria to ensure that they are making the best possible presentation of their qualifications.

The [application](#) for admission is available on the UWS website.

## Specific Admission Requirements - Certificate HNFM

- Health professional with masters or first professional degree (DC, MD, DO, ND, LAc, etc.)
- Prior college coursework in biology (minimum 3 semester credits or 4 quarter credits), physiology or anatomy/physiology (minimum 3 semester credits or 4 quarter credits), and biochemistry or organic chemistry (minimum 3 semester credits or 4 quarter credits) are required.
- An in-person or telephone interview with the MS-HNFM director or a program instructor.

## Curriculum Sequence Certificate HNFM

Certificate in Human Nutrition and Functional Medicine			
Course #	Course Name	Credits	Hours
MSN 6100	Principles of Functional Medicine	5	55
MSN 6101	Evidence-based Nutrition	3	33
MSN 6204	Gastrointestinal Imbalances	4	44
MSN 6300	Detoxification and Biotransformation Pathways and Imbalances	3	33
MSN 6302	Hormone and Neurotransmitter Regulation and Imbalances	3	33
MSN 7100	Oxidative/Reductive Dynamics and Energy Production	4	44
MSN 7200	Immune Imbalances and Inflammation	4	44
	Elective (choose from list of 8 electives)	2	22
	<b>Total</b>	<b>28</b>	<b>308</b>
MSN 8100	Botanical Medicine	2	22
MSN 8101	Nutrition in Special Populations	2	22
MSN 8102	Advanced Practices	2	22
MSN 8105	Hypertension and Metabolic Syndrome	2	22
MSN 8106	Functional Medicine for Autoimmune Diseases	2	22
MSN 8120	Optional Supervised Nutrition Practice Experience I	2	66-335
MSN 8121	Optional Supervised Nutrition Practice Experience II	2	66-335
MSN 8122	Optional Supervised Nutrition Practice Experience III	2	66-335
MSN 8125	Pharmacology and Drug-Nutrient Interactions	2	22
MSN 8135	Psychology of Eating and Wellness	2	22



# Master of Science Diagnostic Imaging (MS-DI)

## Mission

The mission of the MS in diagnostic imaging and associated residency program is to train doctors of chiropractic as specialists and consultants in diagnostic imaging and to prepare program residents for examinations administered by the American Chiropractic Board of Radiology.

## About the Program

The MS in diagnostic imaging produces clinician-scholar specialists in the field of diagnostic imaging. Graduates from the program will possess general competencies as a chiropractic radiologist with sub-specialty level ability in neuromusculoskeletal imaging. The program represents an area of specialty practice skills development coupled with expectation of the participant's scholarly production. Graduates of the MS in diagnostic imaging program are eligible to obtain specialty recognition through the American Chiropractic Board of Radiology (ACBR), which is the designated recognizing body for certifying expertise in diagnostic imaging.

The program consists of 2,723.5 clock hours and 114.5 quarter credits, which spans three calendar years. Diagnostic imaging students are employed full-time as graduate residents at the university during the program. The program represents a "learning by immersion" opportunity in which residents engage in teaching and learning, scholarship and professional socialization within the specialty of diagnostic imaging. Because of the unique nature of radiology as a specialty practice, this model is the most effective approach to developing the core competencies necessary to practice as a consultant/specialist in this field.

The program is currently structured for a maximum of three residents. The university will admit one to two residents per year. Participants maintain full-time employment with the university during the program as graduate residents. As a condition of employment, the resident must demonstrate satisfactory performance and progress throughout the duration of the program.

## Program Goals:

1. Graduate radiologists of the highest skill, integrity, and professionalism who obtain board certification on their initial attempt.
2. Produce competent consultants who are able to offer counsel and support for practicing DC practitioners and their patients.
3. Produce competent scholars within the specialty of radiology.
4. Produce competent practitioners who are successful in their radiology practices.
5. Produce competent educators on subjects related to diagnostic imaging at the DC program level as well as the postgraduate and continuing education level.

## Admission to the MS Diagnostic Imaging Program

### Specific Admission Requirements (MS-DI)

- An earned DC degree from a chiropractic college accredited by the Council on Chiropractic Education, prior to beginning the residency program.
- Be eligible for or hold an Oregon license to practice chiropractic within 6 months of starting in the program. All residents must acquire an Oregon license before they can progress into the third quarter of their residency. Any resident who has not acquired an Oregon license shall be subject to immediate dismissal from the program without opportunity to return. Any resident who fails to maintain a sanction-free license to practice will be subject to sanction up to termination of employment without opportunity to return.
- Have a recommended cumulative GPA of 3.0 (on 4-pt. scale) in the DC professional program.
- A cumulative GPA of at least a 3.0 in the radiology courses, without receiving any grade lower than a grade of C in any radiology course.
- Submit three professional letters of recommendation with one from a certified specialist in chiropractic radiology (DACBR).

## Application Procedure

Applicants should contact the office of admissions to request an application packet, which includes:

- Residency application form.
- Residency handbook.
- Resident job description.

To apply to the program, the following materials must be submitted:

1. Letter of intent.
2. Completed residency application form.
3. Current curriculum vitae.
4. Original, official transcripts from the applicant's DC program.
5. Three professional letters of recommendation, with one from a certified specialist in chiropractic radiology (DACBR).

## **Application Processing**

Applicants must submit a completed application with supportive documentation, official transcripts, and letters of recommendations to:

University of Western States  
Attention: Admissions Department  
Diagnostic Imaging  
2900 132<sup>nd</sup> Ave., Portland, OR 97230

## **Selection Process**

The Residency Committee interviews and selects residents. This committee consists of:

- Director, MS Diagnostic Imaging and Residency (committee chair)
- Chair, Department of Clinical Sciences
- Dean, Graduate and Professional Studies
- Provost (ex-officio)
- Vice President, Clinic Affairs
- One teaching faculty-DACBR, appointed by committee chair
- One faculty member-at-large

The Residency Committee reviews all applications and related materials, and selects applicants for interviews on campus. Those chosen for interview for the residency program will be required to visit the campus (at the candidate's expense) for the purpose of an interview, presentation, and examination. Selected candidate(s) will receive details for on-campus interview. The visit will include:

- Interviews with committee members and departmental representatives.
- An oral examination including interpretations of films at the view box with members of the department of diagnostic imaging.
- A written examination on diagnostic imaging.

The Residency Committee recommends a single candidate after review of the application, transcripts, letters of recommendation, examination results, and campus interviews. This recommendation is based on committee consensus.

Candidates will be notified in writing of the decision of the committee. The selected resident-candidate will receive a letter of acceptance and intent that shall be returned to the university within 10 calendar days. In the event that the selected resident-candidate declines the appointment or fails to submit a letter of acceptance and intent, then the committee reserves the right to offer the position to another candidate.

## **Oregon License Requirement**

Any resident who has not acquired an Oregon license by the beginning of Q3 of the program shall be subject to immediate dismissal from the program without opportunity to return. Any resident who fails to maintain a sanction-free license to practice may be subject to termination of employment without opportunity to return.

## **Technical Standards**

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll, with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

## Program Requirements and Grades

Course syllabi outline detail course assessment methods. Residents are required to achieve a grade of C or better for all courses; or a grade of Pass, where applicable. A second course failure will result in academic probation. Three failures of any course or any section of the residency will result in dismissal from the program without opportunity to return. Students in the MS in diagnostic imaging are expected to:

1. Demonstrate proficiency in imaging interpretation.
2. Demonstrate proficiency in imaging report writing.
3. Produce high-quality radiographs.
4. Master radiation use and safety procedures.
5. Conduct student tutorials.
6. Conduct, complete and publish the findings of a research or scholarly project (thesis).

## Competencies and Expected Learning Outcomes - MS in Diagnostic Imaging

1. Accurate interpretation of diagnostic images.
2. Ability to recommend/acquire appropriate studies.
3. Teaching excellence.
4. Scholarship and information literacy.
5. Professionalism as a practitioner and a consultant to physicians and patients.
6. Effective clinical radiology practice.

During the last year of the program, students work in the UWS clinic system, interpreting diagnostic images and generating imaging reports. Successful completion of the program qualifies the student to sit for the examinations of the American Chiropractic Board of Radiology.

## Curriculum Sequence - MS-DI

Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
1	MDI 7100	Radiation Health and Safety and Physics of Imaging	0	2	22	1.0	G
1	MDI 7110	Normal Variants, Congenital Anomalies, and Skeletal Dysplasia	2	1	33	2.5	G
1	MDI 7120	Clinical Radiology Phase 1A	0	6	66	2.0	G
1	MDI 7130	Instructional Methods 1	1	2	33	2.5	G
1	MDI 7140	Teaching Practicum 1A	0	1	11	0.5	G
1	MDI 7150	Research Methodologies: Information Literacy	1	1	22	1.5	G
Q1 Totals			4	13	187	10.0	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
2	MDI 7200	Physical Injury of the Musculoskeletal System	2	6	88	5.0	G
2	MDI 7210	Clinical Radiology Phase 1B	0	3	33	1.0	G
2	MDI 7220	Instructional Methods II	1	1	22	1.5	G
2	MDI 7230	Teaching Practicum 1B	1	2	33	2.0	G
2	MDI 7240	Preparation of Thesis Proposal	0	3	33	1.0	G
Q2 Totals			4	15	209	10.5	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
3	MDI 7300	Arthritides	1	4	55	3.0	G
3	MDI 7310	Infectious Disorders of Bone	1	2	33	2.0	G
3	MDI 7320	Clinical Radiology Phase 1C	0	3	33	1.0	G
3	MDI 7330	Instructional Methods III	0	1	11	0.5	G
3	MDI 7340	Teaching Practicum 1C	1	2	33	2.0	G
3	MDI 7350	Thesis Preparation I	1	3	44	2.0	G
Q3 Totals			4	15	209	10.5	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
4	MDI 7400	Neoplastic and Neoplastic-like Lesions of Bone	1.0	3	44.0	2.5	G
4	MDI 7410	Clinical Radiology Phase 1D	0.0	3	33.0	1.0	G
4	MDI 7420	Instructional Methods IV	1.0	2	33.0	2.0	G
4	MDI 7430	Teaching Practicum 1D	1.5	3	49.5	3.0	G
4	MDI 7440	Thesis Preparation II	1.0	6	77.0	3.0	G
Q4 Totals			4.5	17.0	236.5	11.5	

Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
5	MDI 8100	Metabolic, Endocrine, and Nutritional Disorders of Bone	1	2	33	2.0	G
5	MDI 8110	Hematopoietic Disorders of Bone	0	1	11	0.5	G
5	MDI 8120	Clinical Radiology Phase 2A	0	6	66	2.0	G
5	MDI 8130	Teaching Practicum 2A	1	3	44	2.5	G
5	MDI 8140	Thesis Preparation III - Oral Defense	1	6	77	3.0	G
		<b>Q5 Totals</b>	<b>3</b>	<b>18</b>	<b>231</b>	<b>10.0</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
6	MDI 8200	Magnetic Resonance Imaging of the Musculoskeletal System	2	4	66	4	G
6	MDI 8210	Clinical Radiology Phase 2B	0	9	99	3	G
6	MDI 8220	Teaching Practicum 2B	1	3	44	2.5	G
6	MDI 8230	Thesis Revision and Submission	1	6	77	3	G
		<b>Q6 Totals</b>	<b>4</b>	<b>22</b>	<b>286</b>	<b>12.5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
7	MDI 8300	Neuroimaging of the Spine, Brain and Head/Neck	1	4	55	3.0	G
7	MDI 8310	Clinical Radiology Phase 2C	0	9	99	3.0	G
7	MDI 8320	Teaching Practicum 2C	1	3	44	2.5	G
7	MDI 8330	Thesis Submission and Final Draft	0	6	66	2.0	G
		<b>Q7 Totals</b>	<b>2</b>	<b>22</b>	<b>264</b>	<b>10.5</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
8	MDI 8400	Imaging of the Thorax (Chest)	1	4	55	3	G
8	MDI 8410	Clinical Radiology Phase 2D	0	12	122	4	G
8	MDI 8420	Teaching Practicum 2D	1	3	44	3	G
		<b>Q8 Totals</b>	<b>2</b>	<b>19</b>	<b>221</b>	<b>10.0</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
9	MDI 9100	Imaging of the Abdomen	1	4	55	3	G
9	MDI 9110	Clinical Radiology Phase 3A	0	12	132	4	G
		<b>Q9 Totals</b>	<b>1</b>	<b>16</b>	<b>187</b>	<b>7.0</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
10	MDI 9200	Radiology Residency Review - Bone	1	2	33	2	G
10	MDI 9210	Clinical Radiology Phase 3B	0	12	132	4	G
		<b>Q10 Totals</b>	<b>1</b>	<b>14</b>	<b>165</b>	<b>6.0</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
11	MDI 9300	Clinical Radiology Phase 3C	0	24	264	8	G
		<b>Q11 Totals</b>	<b>0</b>	<b>24</b>	<b>264</b>	<b>8.0</b>	
Qtr.	Course #	Course Name	Lecture	Lab	Clock	Credit	Grade
12	MDI 9400	Clinical Radiology Phase 3D	0	24	264	8	G
		<b>Q12 Totals</b>	<b>0</b>	<b>24</b>	<b>264</b>	<b>8.0</b>	
		<b>Curriculum Totals</b>	<b>29.5</b>	<b>219.0</b>	<b>2,723.5</b>	<b>114.5</b>	

## Course Descriptions - MS Diagnostic Imaging

### **MDI 7100 Radiation Health/Safety and Physics of Imaging (1 credit)**

This course will focus upon the physical principles involved in obtaining plain films radiographs, radiation protection, radiobiology, and advanced imaging. At the completion of this course the resident will be expected to pass a written exam administered by the residency director. (0+2)

### **MDI 7110 Normal Variants, Congenital Anomalies, and Skeletal Dysplasia (2.5 credits)**

This course will focus upon developmental and congenital anomalies of the skeletal system and skeletal dysplasias. The resident will be expected to recognize, adequately describe and discuss the clinical significance of the most common conditions affecting the skeletal system. Additional areas of study will include epidemiology and management and prognosis of the key congenital anomalies and skeletal dysplasias. The resident will also be expected to discuss the role of advanced imaging in these key conditions. Resident tutorial sessions and lab exercises will be expected. Upon completion of this course, the resident will be expected to pass a written and pass an oral exam administered by the residency director. (2+1)

### **MDI 7120 Clinical Radiology Phase IA (2 credits)**

The resident will be expected to demonstrate proficiency in producing high quality radiographic images of all anatomic areas that are consistent with the state of the art and legal scope of chiropractic practice and the resident must participate in quality improvement/quality assurance activities. Upon completion of Clinical Radiology Phase IA, the resident's supervisor will assess the resident's professional demeanor and deportment in a clinical setting. (0+6)

### **MDI 7130 Instructional Methodology I (2.5 credits)**

This course is an introductory course on effective teaching, learning and assessment. As an introductory course it will explore various teaching, learning and assessment theories and paradigms. Residents will gain knowledge of various learning styles of students and explore the various types of teaching approaches that resonate with those styles. It will also provide entry-level information on basic curriculum design and instructional methods. Emphasis on effective methods to teach and evaluate knowledge type competencies will be coupled with practice in creating lecture-type instructional tools. Residents will create a formal lecture on a topic selected in the course as a part of the outcome of the course. (1+2)

### **MDI 7140 Teaching Practicum 1A (0.5 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of radiographic anatomy and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (0+1)

### **MDI 7150 Research Methodologies: Information Literacy (1.5 credits)**

This course will focus upon the knowledge and skills needed to access healthcare-related information. Emphasis will be on information literacy. The resident will demonstrate the ability to access appropriate sources, retrieve, store and effectively use information relative to patient management. (1+1)

### **MDI 7200 Physical Injury of the Musculoskeletal System (5 credits)**

This course will focus upon trauma to the axial skeleton and the appendicular skeleton. The resident will be expected to recognize and accurately describe fractures and dislocations of the axial and appendicular skeleton and be able to distinguish stable from unstable injuries. Additional areas to be covered include terminology, advanced imaging, management and prognosis. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant in Bone Pathology I, a professional level course at UWS that introduces a systemic approach to fracture management, case management of common fractures and dislocations of the axial skeleton and appendicular skeleton. Upon completion of this course, the resident will be expected to pass a written and an oral exam administered by the residency director. (2+6)

### **MDI 7210 Clinical Radiology Phase 1B (1 credit)**

The resident will be expected to demonstrate proficiency in producing high quality radiographic images of all anatomic areas that are consistent with the state of the art and legal scope of chiropractic practice and the resident must participate in quality improvement/quality assurance activities. Upon completion of Clinical Radiology Phase 1B, the resident's supervisor will assess the resident's professional demeanor and deportment in a clinical setting. (0+3)

### **MDI 7220 Instructional Methodology II (1 credit)**

This course will further explore learning environments germane to health care education, focusing on methodologies of skills development. It will also explore in greater depth issues related to curriculum design with emphasis on laboratory and skills development-type instructional methods. Residents will create a formal laboratory-learning module on a topic selected in the course as a part of the outcome of the course. (1+1)

**MDI 7230 Teaching Practicum 1B (1.5 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of radiographic anatomy and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+2)

**MDI 7240 Preparation of Thesis Proposal (5 credits)**

The focus of this course will be in selecting a thesis topic and formulate a thesis that is focused and significant and will add to the body of knowledge in diagnostic imaging. The Residency Committee must agree to the selected thesis topic. (0+3)

**MDI 7300 Arthritides (3 credits)**

This course will focus upon the arthritides affecting the skeletal system. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant in Bone Pathology II, a professional level course at UWS that introduces chiropractic students to the radiologic, laboratory and clinical manifestations of the more common musculoskeletal neoplasms, infections and arthritides. Upon completion of this course, the resident will be expected to pass a written and a oral exam administered by the residency director. (1+4)

**MDI 7310 Infectious Disorders of Bone (2 credits)**

This course will focus upon the infectious disorders of bone. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant in Bone Pathology II, a professional level course at UWS that introduces chiropractic students to the radiologic, laboratory and clinical manifestations of the more common musculoskeletal neoplasms, infections and arthritides. Upon completion of this course, the resident will be expected to pass a written and a oral exam administered by the residency director. (1+2)

**MDI 7320 Clinical Radiology Phase 1C (1 credit)**

The resident will be expected to demonstrate proficiency in producing high quality radiographic images of all anatomic areas that are consistent with the state of the art and legal scope of chiropractic practice and the resident must participate in quality improvement/quality assurance activities. Upon completion of Clinical Radiology Phase 1C, the resident's supervisor will assess the resident's professional demeanor and deportment in a clinical setting. (0+3)

**MDI 7330 Instructional Methodology III (0.5 credits)**

This course will explore teaching and learning environments with emphasis on critical thinking skills development-type instructional methods. Residents will create a formal learning module on a topic selected in the course as a part of the outcome of the course. (0+1)

**MDI 7340 Teaching Practicum 1C (2 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of radiographic anatomy and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+2)

**MDI 7350 Thesis Preparation I (2 credits)**

The student will select a thesis advisor approved by the Residency Committee. The resident will be supervised by and meet regularly with their thesis advisor. The thesis advisor will monitor the resident's progress on their thesis. Upon completion of the quarter, the resident will present portions and/or draft of their work to the residency director. (1+3)

**MDI 7400 Neoplastic and Neoplastic-Like Lesions of Bone (2.5 credits)**

This course will focus upon the neoplastic and neoplastic-like conditions of bone. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant in Bone Pathology II, a professional level course at UWS that introduces the chiropractic student to the radiologic, laboratory and clinical manifestations of the more common musculoskeletal neoplasms, infections and arthritides. Upon completion of this course, the resident will be expected to pass a written and a oral exam administered by the residency director. (1+3)

**MDI 7410 Clinical Radiology Phase 1D (1 credit)**

The resident will be expected to demonstrate proficiency in producing high quality radiographic images of all anatomic areas that are consistent with the state of the art and legal scope of chiropractic practice and the resident must participate in quality improvement/quality assurance activities. Upon completion of Clinical Radiology Phase 1D, the resident's supervisor will assess the resident's professional demeanor and deportment in a clinical setting. (0+3)

**MDI 7420 Instructional Methodology IV (2 credits)**

This course will explore formal and informal assessment methods in teaching and learning environments with emphasis on psychometrics and defensibility of assessment instruments. Residents will create and critique assessment plans and evaluation instruments as a part of the course. (1+2)

**MDI 7430 Teaching Practicum 1D (3 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of radiographic anatomy and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. The residency director will assess student evaluations. (1.5+3)

**MDI 7440 Thesis Preparation II (3 credits)**

This course is a continuation of Thesis Preparation I. The resident will continue to meet with his/her thesis advisor and will focus upon completion of a draft thesis and preparing it for presentation to the Residency Committee. Upon the completion of this course the resident will begin to prepare for oral defense of his/her thesis. (1+6)

**MDI 8100 Metabolic, Endocrine, and Nutritional Disorders of Bone (2 credits)**

This course will focus upon the metabolic, endocrine and nutritional disorders of bone. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant in Bone Pathology III, a professional level course at UWS that familiarizes students with the radiological manifestations, clinical and laboratory presentations, and management of nutritional, metabolic, endocrine, and hematological conditions affecting the skeletal systems. Upon completion of this course, the resident will be expected to pass a written and an oral exam administered by the residency director. (1+2)

**MID 8110 Hematopoietic Disorders of Bone (0.5 credits)**

This course will focus upon the hematopoietic disorders of bone. Identification of plain film radiographic features will be emphasized. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant and/or primary instructor in Bone Pathology III, a professional level course at UWS that familiarizes students with the radiological manifestations, clinical and laboratory presentations, and management of the hematological disorders of bone. Upon completion of this course, the resident will be expected to pass a written and an oral exam administered by the residency director. (0+1)

**MDI 8120 Clinical Radiology Phase 2A (2 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the Campus Health Center. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of the Campus Health Center. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+6)

**MDI 8130 Teaching Practicum 2A (2 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of bone pathology courses and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+3)

**MDI 8140 Thesis Preparation III- Oral Defense (3 credits)**

Upon completion of this course, the resident will present to Residency Committee members an oral defense of his/her thesis. Draft copies of the thesis will be provided to members of the committee at least 3 weeks in advance. (1+6)

**MDI 8200 Magnetic Resonance Imaging of the Musculoskeletal System (4 credits)**

This course will focus upon the clinical application of magnetic resonance imaging for the most common conditions affecting the musculoskeletal system. The basic technical information on how to obtain a quality examination, the normal and abnormal appearance of the musculoskeletal system and the clinical relevance of MRI findings will be covered. Resident tutorial sessions and lab exercises will be expected. The resident will also be lab assistant and/or primary instructor in Bone Pathology III, a professional level course at UWS that review special imaging procedures such as computed tomography, magnetic resonance imaging, bone scan, discography, myelography, ultrasound, tomography and thermography. Upon completion of this course, the resident will be expected to pass a written and an oral exam administered by the residency director. (2+4)

**MDI 8210 Clinical Radiology Phase 2B (3 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the Campus Health Center. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of the Campus Health Center. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+9)

**MDI 8220 Teaching Practicum 2B (2.5 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of bone pathology courses and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+3)

**MDI 8230 Thesis Revision and Submission (3 credits)**

Following oral defense of the thesis, the resident will make revisions as directed by the Residency Committee. (1+6)

**MDI 8300 Neuroimaging of the Spine, Brain and Head/Neck (3 credits)**

This course will focus upon neuroimaging of the spine, brain and head/neck. Basic technical information on how to obtain a quality examination, the normal and abnormal appearance and clinical relevance of the imaging findings of the spine, intracranial and head/neck regions will be covered. Resident tutorial sessions and lab exercises will be expected. Upon completion of this course, the resident will be expected to pass a written and a practical exam administered by the residency director. (1+4)

**MDI 8310 Clinical Radiology Phase 2C (3 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the Campus Health Center. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of the Campus Health Center. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+9)

**MDI 8320 Teaching Practicum 2C (2.5 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of bone pathology courses and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+3)

**MDI 8330 Thesis Submission and Final Draft (2 credits) (0+6)****MDI 8400 Imaging of the Thorax (Chest) (3 credits)**

This course will focus upon how to obtain high quality examination of the chest, understanding of the key clinical indications for exam procedures, and knowledge of normal anatomy. The resident will be able to recognize abnormal radiographic patterns and know basic preliminary management of conditions affecting the thorax. The resident will also be lab assistant and/or primary instructor in Soft Tissue Interpretation, a professional level course at UWS that familiarizes the student with common conditions affecting the thorax. Upon completion of this course, the resident will be expected to pass a written and a practical exam administered by the residency director. (1+4)

**MDI 8410 Clinical Radiology Phase 2D (4 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the Campus Health Center. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of the Campus Health Center. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+12)

**MDI 8420 Teaching Practicum 2D (2 credits)**

This course is a teaching practicum where the resident will be directing instruction of professional level courses at UWS. The resident will be the instructor and/or lab instructor of bone pathology courses and will be directly supervised by the assigned primary instructor of diplomate status in chiropractic radiology. The assigned supervisor will assess the resident for teaching proficiency, level of knowledge, and professional demeanor and deportment. Student evaluations will also be assessed. (1+3)

**MDI 9100 Imaging of the Abdomen (3 credits)**

This course will focus upon how to obtain high quality examination of the abdomen, understanding of the key clinical indications for exam procedures, and knowledge of normal anatomy. The resident will be able to recognize abnormal radiographic patterns and know basic preliminary management of conditions affecting the abdomen. The resident will also be lab assistant and/or primary instructor in Soft Tissue Interpretation, a professional level course at UWS that familiarized the student with common conditions that affect the abdomen. Upon completion of this course, the resident will be expected to pass a written and a practical exam administered by the residency director. (1+4)



**MDI 9110 Clinical Radiology Phase 3A (4 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the off-site health centers. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of these clinics. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+12)

**MDI 9200 Radiology Residency Review - Bone (2 credits)**

This course will focus upon preparing the resident for the part I written examination administered by the American Board of Chiropractic Radiologists. The course will emphasize the diagnostic criteria, clinical abnormalities, laboratory abnormalities, pathologic manifestations, radiographic findings, classic, advanced and uncommon manifestations of the most common musculoskeletal condition. Advanced imaging, management, prognosis, associated diseases and key differentials will also be reviewed. (1+2)

**MDI 9210 Clinical Radiology Phase 3B (4 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the off-site health clinics. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of these clinics. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+12)

**MDI 9300 Clinical Radiology Phase 3C (8 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the off-site health clinics. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of these clinics. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+24)

**MDI 9400 Clinical Radiology Phase 3D (8 credits)**

The resident will be expected to dictate clear, detailed and accurate reports on imaging studies of patients within the off-site health clinics. These reports will be assessed for accuracy and clarity by an assigned radiologist. The resident will also be expected these reports in a timely fashioned as required under policy. Furthermore, the resident will be available for consultation with physicians and interns of these clinics. Evaluation will be based upon feedback from physicians and by the assigned radiologist assessing the resident's radiology reports. (0+24)

# College of Undergraduate Studies

## Mission

The mission of the UWS College of Undergraduate Studies is to provide students with knowledge, skills, and abilities to excel in the workforce and as life-long learners.

The College of Undergraduate Studies offers the following programs/course offerings:

1. Certificate program in massage therapy.
2. Bachelor of Science in human biology degree completion program.
3. Pre-professional science program: Online undergraduate prerequisite coursework in the health sciences.

## Degrees and Programs

### Massage Therapy Certificate Program

#### Purpose

The purpose of the massage therapy program is to educate students in the science and art of therapeutic massage with a focus on the knowledge, technical skills, ethics, and attitudes necessary for a successful career as a member of an integrated, multidisciplinary health care system. The program is committed to fostering life-long learners who will support the advancement of research, education, and community involvement of the massage profession.

#### About the Program

The UWS massage therapy program seeks to give graduates the skills necessary to work within a multidisciplinary health care team and contribute meaningfully to the wellness of massage clients.

The UWS Massage Therapy Program is science-based and clinically oriented. The curriculum holds students to the highest standards of ethical and professional conduct. The program provides exemplary instruction, drawing from a variety of health care educators and practitioners, including physicians and experienced massage practitioners.

The massage program is a 47.5 credit certificate program (768 hours). The program is designed to be completed in one year (12 months). Credit hours are calculated in accordance with [Policy 1210 Credit Hour Definition](#).

Students are admitted each fall and spring quarter. Classes at the Portland campus are typically held Monday through Thursday from 6-10 p.m. Classes at the Salem campus are typically held in the morning or early afternoon, depending on start date. Clinical rotations and open labs at both campuses are typically held during the day, one to two days a week. There are seminar classes and outreach events held on weekends approximately once a quarter. Students are required to complete 160 hours in the clinic doing massage or massage practice related activities (e.g., filing, scheduling, managing linens, etc.). Clinic hours are obtained through the Health Centers of UWS campus or community locations, or through supervised activities/outreach.

#### Student-to-Teacher Ratio

In order to ensure the highest quality educational experience and to make sure that students get the individualized attention they need, UWS maintains a 13:1 (or lower) student-teacher ratio for all classes that have hands-on or lab components. In lab classes where there are more than 13 students, qualified Teacher's Assistants (TAs) work with the instructor to make sure that every student gets individual coaching and instruction. The student-to-teacher ratio for lecture courses is limited to 60:1.

### Massage Therapy Program Campus Locations

**UWS Main Campus**  
2900 NE 132<sup>nd</sup> Avenue  
Portland, Oregon, 97230

**UWS Salem Campus**  
On Chemeketa Community College - Salem Campus  
4000 Lancaster Drive Northeast Building 8, Room 8123  
Salem, Oregon 97305-1453

## Admission - Massage Therapy Program

### Application Procedure

UWS admits new students into the MT Program each fall and spring. Applications must be completed at least two weeks prior to expected start date.

The application packet includes a list of materials that must be submitted for official consideration of an applicant's file. Applicants are urged to carefully review the selection criteria to ensure that they are making the best possible presentation of their own qualifications. The [application for admission](#) is available on the UWS website.

Evaluation for admission begins when a complete application package has been received. Applicants will be accepted on the basis of the professional judgment of the admissions staff as well as the availability of space. UWS reserves the right to deny admission for any reason other than those prohibited by law and, based on updated information, to reconsider and retract any candidate's acceptance prior to enrollment.

A conditional acceptance can be offered to applicants who have supplied sufficient information supporting such a decision. Minimum needed information includes: a completed application with fee, transcripts from all previous academic placements, and the admission interview. Full acceptance will be offered once all admission conditions have been fulfilled and the student continues to meet the selection standards.

Massage therapy students should also refer to admissions information in the Academic Overview section of this catalog.

### **Academic Preparation**

Western States will admit and enroll students who are likely to have academic success at UWS and professional success as providers of therapeutic massage. UWS enrolls students with a wide variety of educational experiences; therefore, it is recommended that applicants have at least a 2.0 GPA in their most recent educational setting or a sectional score of 450 or better on their state GED exam. Additionally, for best preparation, UWS recommends high school students complete at least one year of the following high school classes: biology, chemistry, physics, and math through algebra.

### **MT Admissions Requirements**

1. Applicants must be at least 18 years old by the start of the program.
2. Applicants must submit official transcript or diploma showing completion of HS or GED.
3. Applicants must have an interview with admissions staff or program director.
4. Applicants must be physically able to perform all the job duties of a licensed massage therapist as described in [Policy 1206 Technical Standards](#).
5. Applicants must submit one professional reference and proof they have received one massage from a licensed professional or through a UWS clinic.
6. Applicants must disclose any criminal background. A criminal background check and electronic fingerprinting is required for massage licensure in the State of Oregon. UWS reserves the right to require a criminal background check for students applying to its program.

### **Technical Standards**

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

### **Exempting Courses and Advanced Standing**

UWS recognizes students may have completed courses and achieved competency from another massage therapy program prior to enrolling at UWS. In the event students want to exempt courses or receive advanced standing for previous coursework, the following will need to occur:

- Students must apply and be accepted into the massage therapy program at UWS.
- Students must provide official transcripts and whenever possible a course syllabus from the institution where credit was earned.
- UWS faculty will evaluate transcripts and syllabi to ensure similar content was covered and competency was achieved.
- Applicant may be required to pass written and/or practical exams with UWS faculty to demonstrate competency.
- Fees may apply and tuition will be adjusted accordingly.
- Advanced standing must be cleared prior to the start date for the course.

Coursework that was completed more than 5 years ago will not be considered. Please refer to [Policy 1209 Course Exemption](#).

## **Transfer Credit**

Transfer credit is awarded according to [Policy 2007 Transfer Credit](#)

Transfer students must meet the same requirements for admission as new students. Transfer students must be in good standing and earned a minimum cumulative GPA of 2.0 in all work completed at the previous massage school. Transfer credit may depend on the accreditation status of the school from which the student is transferring. Transfer students may be required to take one or more course competency exams to demonstrate competency prior to the acceptance of transfer credit/s.

## **Equivalency Tests**

Transfer students may be required to take written, oral, and/or practical examinations to verify that they have adequate preparation for the UWS Massage Therapy curriculum.

## **Matriculation Date for Transfer Students**

Transfer students may apply to begin at UWS for any term. The registrar will determine the actual term of matriculation.

## **Financial Aid - Massage Therapy Program**

All massage therapy students, who complete the FAFSA, are automatically considered for all types of aid in the order listed below. Students are awarded the maximum amount of each type of aid, based on their eligibility as calculated by the U.S. Department of Education. Grants do not require repayment. Loans must be repaid on time, in full, with interest. These are the types of federal and state aid available:

### **Pell Grants (based on level of enrollment and EFC)**

- Up to \$1,433 per term of enrollment (eligible EFC range: \$0-\$5,000).
- Not available to students who have previously earned a bachelor's degree or higher.

### **Federal Supplemental Education Opportunity Grants (FSEOG)**

- Dependent upon Pell Grant eligibility.
- Amounts vary depending on funds available to award.

### **Oregon Opportunity Grants (OOG)**

- Must meet Oregon residency requirements and meet need criteria determined by the Oregon Student Assistance Commission (OSAC).
- Funds are awarded by OSAC limited by FAFSA filing date.

### **Federal Perkins Loans (based on EFC, timely FAFSA application, and availability of funding)**

- Amounts vary depending on funds available to award.
- UWS is the lender; the university's servicer, ECSI, will handle the student's billing for this loan.
- No interest accrues and no payments are required while the student is enrolled at least half-time.
- Grace period: the student has nine months after graduation or leaving school before repayment begins.
- Fees: 0.0 percent. Fixed interest rate: 5.0 percent.

### **Federal Direct Loans**

Subsidized and Unsubsidized; also known as Stafford or Direct Loans

- The U.S. Department of Education is the lender.
- No credit check needed.
- Dependent student annual limit: \$5,500, of which \$3,500 is the maximum subsidized amount.
- Independent student annual limit: \$9,500, of which \$3,500 is the maximum subsidized amount.
- Dependent student aggregate/lifetime limit: \$31,000, of which \$23,000 may be subsidized.
- Independent student aggregate/lifetime limit: \$57,500, of which \$23,000 may be subsidized.
- Subsidized loans are generally interest-free while students are enrolled at least halftime.
- Interest accrues from the date of disbursement on unsubsidized direct loans.
- No payments are required while students are enrolled at least halftime.
- Fees: approximately 1.0 percent (deducted from each loan disbursement).
- Fixed interest rate: 4.66 percent on Stafford loans first disbursed between July 1, 2014 and June 30, 2015.

### **Federal Direct Parent PLUS loans (only available for dependent students)**

- The U.S. Department of Education is the lender.
- Credit check required; endorser may be required.
- Can be borrowed by a parent for a dependent student to cover the Cost of Attendance, minus any other financial assistance.
- Fees: approximately 4.2 percent (deducted from each loan disbursement).

- Fixed interest rate: 7.21 percent on PLUS loans first disbursed between July 1, 2014, and June 30, 2015.

### **Other Non-Federal Sources of Funding**

Students in all programs may be eligible for non-federal sources of funding. UWS offers some limited scholarship funds to incoming MT students. Refer to the [UWS website](#) for more information.

### **Satisfactory Academic Progress (SAP) - Massage Therapy Program**

Federal regulations require all students receiving federal student aid to make satisfactory academic progress (SAP) toward a degree or certificate in order to retain eligibility for financial aid. Failure to maintain SAP, including minimum cumulative GPA and adequate progress toward degree completion, will result in the disqualification from federal student aid programs at UWS. Please refer to [Policy 3804 Satisfactory Academic Progress for Financial Aid Eligibility](#).

### **Normal Progress - Massage Therapy Students**

UWS offers both full-time and part-time options. However, all courses are not available every term, and many courses must be taken in sequence. An incomplete or failed grade in a course must be removed as prerequisite to the next course in this sequence. Completion of the program requires a passing grade in all courses and a cumulative GPA of 2.0 or above. Credit will not be given for courses from which students withdraw. Participation in the UWS massage therapy program may be required outside the typical school day. Students need to be prepared to be available whatever days of the week or hours of the day are necessary to meet the program requirements.

### **Academic Standing - Grades, Probation, and Dismissal**

Students in the massage therapy program should refer to the Academic Policies section of this catalog for further information on grading, academic probation, and dismissal. Also see [Policy 1233 Academic Standing DC and Undergraduate Programs](#).

All massage therapy practical (hands-on) courses and Kinesiology I and II courses must be completed with a grade of C or better. If a lower grade is earned, the course will need to be repeated.

A grade of W is recorded on a student's official record if the student officially withdraws after the end of the third week of the term. Only A through F grades assigned for courses will be used in computation of either quarterly or cumulative grade point averages.

### **Class Attendance and Tardiness**

Some certifications of eligibility to sit for state licensing examinations include confirmation that a student has not only passed the necessary coursework, but also that the student has met attendance requirements. To comply with these licensure requirements, see [Policy 1204 Attendance and Tardiness](#).

Students are expected to attend all classes. Work missed due to illness or emergencies must be made up after consultation with the instructor. It is the student's responsibility to make arrangements for make-up work.

Faculty members will include attendance requirements in their course syllabi, which are distributed to students during the first week of the quarter. When the instructors' records indicate that students exceeded the standard for their class as stated in the course syllabus, students are reported to the registrar. The registrar notifies those students that additional absence may result in failure of the course.

Due to the intensive nature of the massage therapy curriculum, tardiness is strongly discouraged. Instructors may refuse entry to tardy students when their entry would disrupt class proceedings, and when stated in the course syllabus, tardiness that exceeds the stated allowable time interval, if any, may be recorded as an unexcused absence.

Students are urged to make travel reservations well in advance of peak holiday demands so that there are no conflicts between course attendance requirements and travel schedules.

### **Clinic Attendance**

The clinical experience at UWS is the first opportunity students have to model behaviors that will be needed for future success as a massage practitioner. Poor attendance/tardiness for appointments in the professional world can have detrimental effects on one's career, and is also unfair to scheduled clients. Specific clinic attendance policies are described, in detail, in the Clinic Handbook. Excused absences will be determined on a case-by-case basis by the clinic supervisor. Failure to give adequate notice for a tardy, absence or no-call/no-shows for clinic shifts may result in a failing grade.

### **Outreach/Off Campus Events**

Massage therapy students are required to participate in a minimum of 10 hours outreach/off-campus events during the program. Outreach is a graded assignment in MSG 4125 Clinic IV. The 10 hours may be accumulated throughout the program.

### **Makeup Exams/Coursework**

In the event of a student's unavoidable absence, beyond the student's control, make-up exams may be administered in accordance with [Policy 1223 Make-Up Examinations](#).

### **Articulation Agreement for Associate Degree Completion Programs**

Graduates of the UWS massage therapy program are eligible to transfer credits earned with a grade of C or higher to Chemeketa Community College in Salem, Oregon. The credits may be applied towards the completion of an associate in general studies (AGS) or an associate of arts Oregon transfer (AAOT). Students pursuing the AGS will be able to transfer 44 credits to Chemeketa Community College. The remaining 46 credits would be fulfilled through Chemeketa Community College via online or face-to-face coursework. Students pursuing the AAOT will be able to transfer 29 credits with the remaining 61 credits fulfilled in accordance with Chemeketa Community College guidelines. [www.chemeketa.edu](http://www.chemeketa.edu).

### **Massage Boards and Licensure Information**

In order to practice massage therapy in the State of Oregon, a therapist must have attended a school with a minimum of 500 clock hours or the equivalent number of credit hours of training; pass written and practical tests; and pay all fees associated with licensure.

Most UWS massage therapy students are from Oregon and Washington. The UWS massage therapy program has been approved by both states. Because licensure requirements vary from state to state, students are urged to review the licensure requirements for the state in which they wish to practice on the respective state regulatory website prior to applying to UWS. For states that do not require a license, local and municipal laws may apply. A list of the massage regulatory agencies for all states can be found at the American Massage Therapy Association's website: [www.amtamassage.org/regulation](http://www.amtamassage.org/regulation).

### **License by Health Endorsement**

The state of Oregon allows individuals who currently hold one of the following credentials: MD, ND, DC, PT, OT, RN, LPN, PA, and LAC to apply for an Oregon Massage License after completing a condensed massage program.

The UWS license by health endorsement program will prepare medical professionals to become licensed massage therapists. Our hands-on curriculum will provide extensive clinical experience and a sound foundation in kinesiology and therapeutic massage techniques. Contact the office of admissions at [admissions@uws.edu](mailto:admissions@uws.edu) for more information.

### **Educational Objectives - Massage Therapy Program**

Graduates of the UWS massage therapy program will:

1. Pass the necessary licensing/certification examinations required to practice therapeutic massage in the State of Oregon.
2. Demonstrate the ability to work within a multi-disciplinary healthcare team.
3. Demonstrate scientific and technical knowledge of massage therapy and its effects on the human body.
4. Employ critical thinking skills to evaluate each massage session and will apply appropriate massage and bodywork methods.
5. Apply massage for both therapeutic benefit and general wellness.
6. Demonstrate appropriate self-care strategies, which include correct body mechanics.
7. Demonstrate the highest qualities of ethics and professionalism.
8. Demonstrate knowledge of appropriate business practices.
- 9.

### **Completion Requirements**

The massage therapy certificate is conferred upon the individual who has fulfilled the following requirements:

1. Four academic quarters of study, two quarters of which be completed in residence at the university with a minimum cumulative GPA of 2.0 on all required coursework.
2. Maintenance of enrollment eligibility through satisfactory academic performance, professional development and behavior.
3. Successful completion, with a grade of "C" or better in all required courses, lectures, labs, clinical training, and seminars.
4. Successful completion of minimum clinic graduation requirements as officially communicated to students through the university catalog, student publications, and other official documents of the university.
5. Freedom from all indebtedness and other obligations to the university.

## Curriculum Sequence - MT Program

Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
1	BIO 1121	Anatomy and Physiology I - Lecture	22	0	0	22	2	G
1	BIO 1122	Anatomy and Physiology I - Lab	0	22	0	22	1	P/F
1	BIO 1123	Medical Terminology	11	0	0	11	1	G
1	MSG 1109	Clinic I - Intro to Clinic	0	15	0	15	0.5	P/F
1	MSG 1124	Communications and Ethics	33	0	0	33	3	G
1	MSG 1125	Kinesiology I	11	22	0	33	2	G
1	MSG 1126	Wellness & Relaxation Massage	22	22	0	44	3	G
Q1 Totals			99	81	0	180	12.5	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
2	BIO 2121	Anatomy and Physiology II - Lecture	22	0	0	22	2	G
2	BIO 2122	Anatomy and Physiology II - Lab	0	22	0	22	1	P/F
2	BIO 2124	Pathology	33	0	0	33	3	G
2	MSG 2121	Fundamentals of Treatment-based Massage	11	33	0	44	2.5	G
2	MSG 2123	Kinesiology II	11	22	0	33	2	G
2	MSG 2127	Clinic II	0	0	35	35	1	P/F
Q2 Totals			77	77	35	189	11.5	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
3	BIO 3120	Anatomy and Physiology III - Lecture	22	0	0	22	2	G
3	BIO 3121	Anatomy and Physiology III - Lab	0	22	0	22	1	P/F
3	MSG 3105	Massage for Cancer Patients	20	0	0	20	2	P/F
3	MSG 3125	Clinic III	0	0	55	55	1.5	P/F
3	MSG 3126	Treatment-based Massage for Specific Conditions	11	33	0	44	2.5	G
3	MSG 3127	Sports and Rehabilitation Massage	11	33	0	44	2.5	G
Q3 Totals			64	88	55	207	11.5	
Qtr.	Course #	Course Name	Lecture	Lab	Clinical	Clock	Credit	Grade
4	MSG 4105	Professional Development	16	0	0	16	1	G
4	MSG 4123	Business Management	44	0	0	44	4	G
4	MSG 4125	Clinic IV	0	0	55	55	1.5	P/F
4	MSG 4126	Massage Capstone	11	11	0	22	1.5	P/F
4	MSG 4127	Survey of Modalities	11	11	0	22	1.5	G
4	MSG 4128	Treating Special Populations	22	11	0	33	2.5	G
Q4 Totals			104	33	55	192	12	
Curriculum Totals			344	264	160	768	47.5	

## Course Descriptions - Massage Therapy Program

### BIO 1121 - Anatomy and Physiology I Lecture

This is the first of a three-part sequence to cover the basic structure and function of the human body. Particular attention will be paid to body organization, cell structure and function, tissues and membranes, and the skeletal and muscular systems.

### BIO 1122 - Anatomy and Physiology I Lab

Lab time for Anatomy and Physiology I will include palpation, use of model skeletons and clay for building muscles as well as observation of prosected human cadavers with a focus on tissues, membranes, and the skeletal and muscular systems.

### BIO 1123 - Medical Terminology

Massage therapists working in a healthcare setting need to be familiar with medical terminology that is commonly used. Greek and Latin root words and prefixes and suffixes are taught in this course. The basic rules behind defining and building medical words and the pronunciation of those words are covered.

### BIO 2121 - Anatomy and Physiology II Lecture

This is the second part of a three-part course covering the structure and function of the human body and covers the integumentary, nervous, cardiovascular, respiratory, lymphatic and immune systems as well as discussion of HIV/AIDS. Lab time will include palpation, use of model skeletons and clay for building muscles as well as observation of prosected human cadavers. Prerequisites: AP I Lecture, AP I Lab

**BIO 2122 - Anatomy and Physiology II Lab**

Lab time for Anatomy and Physiology II will include palpation, use of model skeletons and clay for building muscles as well as observation of prosected human cadavers with a focus on integumentary, nervous, cardiovascular, respiratory, lymphatic and immune systems. Prerequisites: AP I Lecture, AP I Lab

**BIO 2124 - Pathology**

In order to practice massage safely and effectively, students are taught to assess indications and contraindications for massage with regard to disease, surgery, trauma, pain and the issues of sanitation and hygiene surrounding these conditions. Students will learn to modify session plans to accommodate clients with certain conditions. Signs and symptoms of disease, their modes of transmission and general sanitation recommendations will be taught using the Communicable Disease Guidelines for Massage Practitioners.

**BIO 3120- Anatomy and Physiology III Lecture**

This is the third part of a three-part sequence covering the structure and function of the human body, which covers the digestive, endocrine, genitourinary, and fascial systems. Prerequisites: AP I and II

**BIO 3121 - Anatomy and Physiology III Lab**

Lab time for Anatomy and Physiology III will include use of palpation, model skeletons and clay for building muscles as well as observation of prosected human cadavers with a focus on the digestive, endocrine, genitourinary and fascial systems and a musculoskeletal review. Prerequisites: AP II Lecture, AP II Lab

**MSG 1124 - Communication and Ethics**

This course emphasizes written, verbal, and non-verbal communication skills and involves issues around massage therapist-client interaction as well as inter-professional communication (e.g. physicians, physical therapists, etc.). Ethical topics include boundaries, HIPAA regulations, special needs clients, sexual harassment, and licensing guidelines/responsibilities.

**MSG 1125 - Kinesiology I**

This is the first of a two-part course that gives students a basic understanding of how the body moves focusing on muscle groups, joints, ligaments and their actions. Students will learn the structure and function of joints and their classification and function. Students will learn to locate the origins, insertions and actions of the muscles as well as endangerment sites. This course teaches palpation techniques and range of motion principles, which are integral to massage therapy.

**MSG 1126 - Wellness and Relaxation Massage**

This course teaches foundational massage skills. Students will learn pre-massage procedures, techniques for performing wellness/relaxation-focused chair and table massage, and skills for completing the massage session. Students will learn how to integrate wellness and relaxation techniques into every massage session. Students will also learn how stress affects the body and identify effective stress management techniques to enhance their personal wellness and the wellness of their patients.

**MSG 2121 - Fundamentals of Treatment-based Massage**

This course is designed to introduce students to the assessment and treatment of connective tissues of the body, including myofascial tissues. Students will learn assessment and massage techniques that support the treatment of dysfunction and pain. Students will practice critical thinking skills, perform connective tissue therapies and learn self-care techniques. Prerequisite: Wellness and Relaxation Massage

**MSG 2123 - Kinesiology II**

Students continue learning about body movement and palpation of joints and muscles as well as muscle length/strength testing. Prerequisite: Kinesiology I

**MSG 3105 - Massage for Cancer Patients**

The use of complementary medicine in conjunction with allopathic treatments for cancer patients is on the rise. This course prepares the student for integrative medicine programs where they can use massage on patients in hospitals or hospice who are experiencing chronic pain, side effects caused by chemotherapy and radiation, and chronic diseases that get poor results with standard medicine. Massage students discuss the emotional and psychological aspects of cancer as well, including practitioner self-care. Prerequisite: Pathology, FTBM

**MSG 3126 - Treatment based massage for Specific Conditions** Prerequisites: Fundamentals of Treatment-based Massage

This course is designed to teach students how to apply connective tissue therapies to selected specific medical conditions, within a client centered massage therapy session. Students will practice critical thinking skills, treatment planning, treatment protocols and client/self-care.



**MSG 3127 - Sports and Rehabilitation Massage:** Students will learn massage techniques used for, sports and rehabilitation and the special conditions surrounding these types of massages. Topics include injury assessment, basic concepts of strength training, rehabilitation exercise and stretching to improve physical conditions following accidents, injuries, disease. Students learn postural assessment and gait analysis. Conditions such as bursitis, tendonitis, and rheumatoid arthritis are also discussed. Prerequisites: Wellness and Relaxation Massage, Fundamentals of Treatment Based Massage

**MSG 4105 - Professional Development Seminar**

In addition to business operations, massage therapy students will learn how to build a resume, market themselves, and manage their time. Other topics include the role of professional associations for massage therapists; skill development through continuing education and advanced training programs.

**MSG 4128 - Treating Special Populations**

Students will learn methods for working with specific medical conditions such as lymphedema, chronic pain, pre and post-surgery, and scar tissue. Students will also learn indications/contraindications related to herbs and medications, discuss working in a hospital or medical setting and develop strategies for working with elderly clients. Prerequisites: Pathology, FTBM

**MSG 4123 - Business Management**

Students learn basic business and accounting practices, insurance billing, bookkeeping, income reporting, obtaining liability insurance, credentialing requirements, and other topics that are important in establishing and operating a massage therapy practice, or forming a partnership or contract with a corporation. Students will make a business plan including the legal requirements and tax structure of owning a small business.

**MSG 4126 - Massage Capstone:**

Students will demonstrate their preparedness for taking and passing licensure and certification examinations (both written and practical). Students will evaluate their personal learning styles and develop individualized plans for study. Prerequisites: Sports and Rehabilitation Massage, Kinesiology II, Clinic III

**MSG 4127 - Survey of Modalities**

This is an overview and introduction to a number of different massage modalities which are not covered in the core curriculum. Prerequisites: Massage I

## **Clinical Training Courses**

**MSG 1109 - Clinic I - Intro to Clinic**

Prerequisites: None

**MSG 2127 - Clinic II**

Prerequisites: Clinic I, Wellness and Relaxation Massage

**MSG 3125 - Clinic III**

Prerequisites: Clinic II, FTBM

**MSG 4125 - Clinic IV**

Prerequisites: Clinic III

\*In the first quarter of the program, students integrate and refine skills acquired in Q1 courses and prepare for Clinic II in which therapeutic massage treatments are available to the general public. Students become familiar with the aspects necessary in the giving of a safe, effective, and relaxing massage including all aspects of the therapeutic session, and clinic operations. In quarters 2-4, students perform massages on members of the general public in one of the university's integrated health centers. Students use the skills learned in courses such as interviewing clients, recording chart notes, performing physical assessments, and forming treatment plans. A licensed Massage Therapist, or other appropriately credentialed, licensed healthcare provider, will supervise all student-delivered massages.

## **Bachelor of Science in Human Biology Degree Completion Program**

### **Purpose**

The purpose of the bachelor's in human biology program is to equip students with a solid foundation in health and pre-medical sciences. The program also offers chiropractic students and alumni a means by which to complete an undergraduate degree.

### **About the Program**

The BS in human biology degree completion program is available to all current UWS DC program students and alumni. The design of the program is modeled after the general educational components of the traditional liberal arts biology major. The degree fulfills most bachelor's degree requirements for graduate study, employment, or licensure. States that require a bachelor's degree for chiropractic licensure are listed and updated on the Federation of Chiropractic Licensing Board [website](#).

For current DC program students, credits for the BS degree come from a student's previous undergraduate work (at least 135 quarter credits) and coursework from the basic sciences component of the chiropractic program, plus two evidence-informed

practice courses. The credits from the DC program courses are dually attributed to both the BS and DC degree. Students must have a cumulative GPA of 2.0 or higher at the completion of the BS degree requirements to be eligible to receive the BS degree. Students can apply to the bachelor's program at any time and will receive a diploma when all requirements are met.

### **Degree Requirements**

A bachelor's degree traditionally represents a minimum of four years of undergraduate study with a core education of cultural and communication proficiency, a suitable depth of coursework in the major area, plus a breadth of general educational experience. This tradition is incorporated into the UWS bachelor's degree in human biology. Students obtain the general education and life and physical sciences credits prior to matriculation to UWS. The human biology major requirements are obtained while enrolled at UWS. All credit hours listed below are quarter credits. For purposes of conversion, 1.5 quarter credits equal 1 semester credit.

The bachelor's degree requires a total of at least 180 quarter credits distributed in the following areas:

Content Area	Qtr. Credits Required
General Education Requirements	45
Life and Physical Sciences	36
Electives	Minimum 54
Human Biology Major Requirements	Minimum 45
<b>Total</b>	<b>180</b>

### **General Education Requirements**

Students must have at least 45 quarter credits of general education coursework for the degree. Areas of study that satisfy general education requirements include humanities, social studies/social sciences, computer orientation, mathematics, writing, speaking, etc.

### **Requirements for Alumni**

The BS in human biology may also be an option for alumni. Degree applications submitted by alumni will be considered on a case-by-case basis. Graduates who have not completed the evidence-informed practice course sequence will be required to take additional courses in order to meet the learning objectives of the program. These additional courses are biostatistics, baccalaureate writing preparation, and the baccalaureate project preparation seminars. These courses must be taken in sequence except for biostatistics, which can be taken at any time. These additional courses are graded on a Pass/No Pass basis. These courses can be completed from a distance and take approximately 6 to 12 months to complete. Students can enroll in fall, winter, spring, or summer. It is possible to be exempt from the biostatistics course if an elementary statistics course was taken at another regionally-accredited institution and passed with a C or better and was not used to fulfill the physics requirement for entry into the chiropractic program. The other courses must be completed through UWS.

### **Admissions Criteria**

Students will need to complete an [application](#) and pay an application fee. Applicants must have a cumulative GPA of 2.0 or above for admission into the bachelor's program. Current UWS students do not need to submit transcripts as they are already part of the student's academic record through the DC program application process. Alumni may need to submit transcripts.

### **Technical Standards**

UWS requires students to demonstrate the physical, cognitive, emotional, professional, and social capacity to be a competent practitioner in respective course of study. Applicants should review [Policy 1206 Technical Standards](#) to determine whether they are able to meet the standards of the program in which they intend to enroll with or without reasonable accommodations.

If students demonstrate documented need for accommodation in any of these areas, the university will determine the extent to which it can reasonably accommodate the student's needs. Regardless of disability status or accommodation, all students must successfully complete the requirements of their program to earn the degree.

### **Transfer Credit**

Up to 135 credits toward the bachelor's degree are accepted in accordance with [Policy 2007 Transfer Credit](#). A maximum of 12 quarter credits of vocational/technical credits are accepted.

## Class Standing

A student's class standing is determined by the total number of transfer credits awarded, not by the number of years of college study or by the completion of an associate degree.

Class Awarded	Credits Needed
Freshman	0 - 44 credits
Sophomore	45 - 89 credits
Junior	90 - 134 credits
Senior	135+ credits

## Academic Standing

A student must have a cumulative GPA of 2.0 or higher to be eligible to receive the BS degree. Transfer credits from prior undergraduate courses will not contribute to the cumulative GPA, unless they are from courses offered through UWS (e.g., online undergraduate courses, courses from the massage program). For current chiropractic program students, continuing enrollment in the BS program is contingent upon eligibility for continuing enrollment in the DC program through the first five quarters of the program. Please refer to [Policy 1233 Academic Standing DC and Undergraduate Programs](#).

Students transferring to UWS from another chiropractic or health professions school who apply to the bachelor's program will be assessed on a case-by-case basis.

## Residency Requirement

Students must complete at least the last 25 percent of the credits for the degree while in residence as a matriculated student at UWS.

## Tuition and Fees - BS Program

The UWS Board of Trustees establishes tuition for the BS program. There is a non-refundable application fee and a graduation fee. Current chiropractic program students do not pay any additional tuition as the courses are dually attributed. Alumni may be required to take additional courses (see below) at the current undergraduate tuition rate and pay a quarterly enrollment fee.

## Enrollment Status and Financial Aid

The office of financial can determine eligibility for financial aid. Students who are interested in financial aid for undergraduate coursework should contact the office of financial aid at [finaid@uws.edu](mailto:finaid@uws.edu).

## Learning Objectives - BS Human Biology

Students completing the BS in human biology will demonstrate:

- Language, reading, communication, computation, and social skills necessary to engage the expectations of a first professional doctorate program
- Thorough knowledge of gross and microscopic human anatomy
- Thorough knowledge of human physiology
- Thorough knowledge of human genetics and cellular function
- Thorough knowledge of human pathology
- The ability to locate and critically appraise health-related scientific literature

In addition, students need at least 36 quarter credits of life and physical sciences coursework for the BS degree. Courses that satisfy this requirement include biology, physics, chemistry, exercise physiology, anatomy, physiology, etc. At least half of these courses must include a laboratory experience. UWS courses that satisfy this requirement include courses from the massage program in anatomy and physiology and pathology. UWS also has pre-professional science courses available online to satisfy this requirement. These courses include: biology, chemistry, physics, biochemistry, elementary statistics, and organic chemistry. Undergraduate courses are listed on [UWS website](#).

## Electives

Electives include courses in areas such as business, public administration, physical education, and relevant career/technical coursework (12 quarter credits maximum). Career/technical coursework may include courses from the UWS Massage Therapy certificate program.

## Major Requirements

Human biology major requirements are obtained through successful completion of basic science courses and of the first two courses in the evidence-informed practice course series in the DC program. These courses are dually attributed to both the BS and DC degrees and must be passed with a C or better. The dually-attributed courses are upper division courses (senior year) for the bachelor's degree and students are not eligible to enroll in these courses until they have accomplished at least 135 quarter credits toward the BS degree. The following courses from the doctor of chiropractic program can be used to satisfy the requirement of 45 credits of upper division human biology major courses for the degree:

Course #	Course Name*	Quarter Credits
BSC 5103	Gross Anatomy I	7
BSC 5314	Human Development	3
BSC 5116	Cell Biology	3.5
BSC 5203	Gross Anatomy II	5.5
BSC 5217	Histology	5
BSC 5304	Gross Anatomy III	5.5
BSC 5302	Neuroanatomy	7
BSC 5309	Physiology I	5
BSC 6109	Physiology II	5
BSC 6102	Neurophysiology	6
BSC 6203	Nutrition	4
BSC 6207	Genetics	4
CSC 6178	Evidence-informed Practice I	2
CSC 6277	Evidence-informed Practice II	2
Total		64.5

\*Course descriptions can be found in the DC Program section of this catalog.

## Course Descriptions - BS in Human Biology

### **HBI 4301: Biostatistics**

Biostatistics is an online course designed to introduce the student to methods in statistical analysis of experimental data and their appropriate application in health-care research. Topics include simple probability, descriptive statistics, inferential statistics, and experimental design. Biostatistics is normally taken before the writing sequence, but this schedule is not mandatory. If you have already successfully completed a statistics course, check with the dean of the college of undergraduate studies to see if it fulfills this requirement. (2 qtr. credits, pass/no pass)

### **HBI 4302: Baccalaureate Project Writing Preparation**

Baccalaureate Project Writing Preparation is an online course designed to provide students the basic library research and writing tools necessary to undertake the baccalaureate writing project, which occurs during the subsequent three terms. Attention is given to style, format, and manuscript preparation. This course is a prerequisite for the BS Project Preparation Seminar. Credit for this course is not possible through exemption or transfer credit; it must be taken through UWS. (1 qtr. credit, pass/no pass)

### **HBI 4303-4305: Baccalaureate Project Preparation Seminars**

Baccalaureate Project Preparation Seminars is a three-quarter sequence during which students work independently on their research projects under the guidance of the dean of the college of undergraduate studies. A broad range of topics is acceptable. The project may draw upon knowledge in the humanities, social sciences, and natural sciences to address some question in human biology, health care in general, or chiropractic in particular. The project should, in most cases, be 15 to 20 pages in length. This course sequence must be taken through UWS; transfer credit is not available for this series of classes.

HBI4303 is worth 1 credit and HBI4304 and 4305 are each worth 2 credits. (5 credits, pass/no pass)

## Pre-Professional Science Program

The prerequisite online courses offered through UWS help prospective students fulfill the requirements for entrance into graduate and/or professional degree programs such as the doctor of chiropractic program. The credits earned through these courses may be applied toward the BS human biology degree once a student is enrolled in the doctor of chiropractic program.

Special arrangements can be made for students who need fewer than the number of credits listed for each course below. Contact the office of admissions to discuss specific needs.

## Courses Descriptions - Pre-Professional Health Science Courses

Note: Courses that include a laboratory component require the student to purchase a lab kit. Approximate cost is \$200 plus S/H.

### **UANT 242 - Anatomy and Physiology I (6 credits) Online only**

This course focuses on the interrelationship of structure and function of several organ systems. The course covers basic anatomical terminology, cell structure and physiology, all the various tissue types seen in the human body, and then go into a more in depth look at the integumentary, skeletal, and muscular systems. Prerequisite: College-level biology.

### **UANT 242 - Anatomy and Physiology II (6 credits) Online only**

This course focuses on the interrelationship of structure and function of each body system and includes an depth look at nervous tissue, the central and peripheral nervous systems, and the special senses. Also covered are the cardiovascular, respiratory, and digestive systems. Prerequisite: Anatomy and Physiology I.

### **UBIO 240 - Introduction to Biology (5 credits) Online only**

This is an introduction to various facets of human biology including cell structure and function, DNA structure and function, human development, common human pathogens, bacteria and viruses. The laboratory portion of the course is completed using a home lab kit. Prerequisite: None.

### **UBCH 240 - Introduction to Biochemistry (5 credits) Online only**

This is an introductory biochemistry course covering topics such as carbohydrate metabolism, proteins, enzymes, lipids, digestion and nutrition. There is no lab experience with this course. Prerequisite: High school algebra and college-level chemistry required.

### **UCHM 240 - General Chemistry I (5 credits) Online only**

This is an introductory course on the fundamentals of chemical principles. Topics include: the components of matter, chemical equilibrium, chemical reaction types and solution chemistry, gas laws, thermochemistry, quantum theory, atomic structure, electron configurations, chemical bonding models. There is a laboratory portion of this course is completed using a home lab kit. Prerequisite: high school chemistry recommended.

**UCHM 250 - General Chemistry II (5 credits) Online only**

This course emphasizes critical skills and competency in organic and biological chemistry, solution properties, chemical kinetics, equilibrium, environmental chemistry, thermodynamics, electrochemistry, nuclear chemistry. Laboratory experiments demonstrate qualitative and quantitative analytical techniques through the use of a laboratory kit purchased for home use. Prerequisites: General Chemistry I. college-level math, reading, writing, and study skills are strongly recommended.

**UOCH 340 - Organic Chemistry I (6 credits) Online only**

This course presents concepts in the areas of organic and biological chemistry, solution properties, chemical kinetics, equilibrium, environmental chemistry, thermodynamics, electrochemistry, and nuclear chemistry. This course emphasizes critical skills and competency in the above topics. Laboratory experiments are performed using an at-home lab kit to demonstrate qualitative and quantitative analytical techniques. Prerequisite: General Chemistry 1 and 2. College level math, reading, writing, and study skills are strongly recommended.

**USTA 245 - Elementary Statistics (4 credits) Online only**

This is an introductory course in the fundamentals of modern statistical methods. Topics include descriptive statistics, probability, random sampling, hypothesis testing, estimation, simple linear regression, and correlation. This course can be used to fulfill part of the physics prerequisite requirement for entrance into the doctor of chiropractic program. Prerequisite: Undergraduate mathematics course.

**UPHY 250 - Introduction to Physics (5 credits) Online only**

This is a course on general physics to help students master fundamental knowledge of physics concepts. Topics include kinematics, Newton's Laws, and work energy. The laboratory portion of the course is completed using a home lab kit. Prerequisite: Algebra.

**USOC 240 - Science and Health in Society (4 credits) Online only**

This course will examine texts that deal with health and science from a social, historical, and cultural perspective. Students will read books, articles, essays, and short stories, respond to their reading in writing, and explore issues raised in the texts. The course will encourage students to examine their own expectations and assumptions about the delivery of health care in their culture and to reflect on their own present and future roles within the health care system. Prerequisite: None.

## Undergraduate Professional Development Courses

UWS offers non-degree seeking students the opportunity to earn undergraduate professional development credit that has been delivered by approved professional development providers. Undergraduate professional development may be offered in physical education, coaching, sports science, or any general education undergraduate discipline. Interested students should check the [UWS website](#) or contact the dean of undergraduate studies directly for more information.

## Continuing Education

The division of continuing education and postgraduate studies provides educational offerings through seminars, certifications, and diplomate programs for health professionals. These programs meet the ongoing educational needs of health professionals to keep them abreast of the latest information, enhance their existing skills, and advise them of changes in current professional thought to keep their practices relevant. UWS provides continuing education through face-to-face seminars throughout the country, as well as through online courses ranging from 1-36 hours. Included in the online offerings are courses required by the Oregon Board of Chiropractic Examiners.

The division of continuing education is a recognized provider of the Providers of Approved Continuing Education (PACE) program, a service of the Federation of Chiropractic Licensing Boards (FCLB). This is a voluntary program review process that ensures the quality of the chiropractic continuing education programs offered by UWS. Postgraduate certification and diplomate programs for chiropractors in sports medicine and other specialty areas are offered in a weekend format and signify specialized expertise.

UWS is also an approved provider of continuing education for massage therapists through the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) and for other health care workers through the Board of Certification for Athletic Trainers (BOC) and the National Strength and Conditioning Association (NSCA). UWS also provides continuing education courses for chiropractic assistants through face-to-face and distance learning opportunities as approved by the Oregon Board of Chiropractic Examiners.

Since 1999, the division of continuing education has been host to the Northwest Symposium: a three-day event of continuing education seminars for health care professionals. Conference attendees take part in alumni activities and attend continuing education programs provided by highly respected speakers on a wide variety of topics.

For information about upcoming continuing education programs, please check the [CE Events Calendar](#) on the UWS website.

### Chiropractic Assistant Program

The division on continuing education offers training opportunities for clinic support staff known as chiropractic assistants (CA). This training is in keeping with the standards and procedures set forth by the Oregon Board of Chiropractic Examiners (OBCE) - the agency that grants the CA license. Chiropractic assistants work alongside chiropractors to facilitate patient care and are also trained in front office skills, such as billing and coding. Students interested in obtaining CA licensure must be at least 18 years of age.

The curriculum for initial CA training includes, but is not limited to, the following subjects: medical terminology, anatomy and physiology, professionalism, ethics, boundaries, billing and coding, communication skills, and physiotherapy. The current regulations state that an initial training course must be at least 12 hours in length. The schedule of initial training and continuing education courses provided can be found on the university's [continuing education webpage](#) or the [OBCE website](#).

## Student Services

Students at UWS have diverse backgrounds, interests, experiences, talents, and areas of expertise. Although many UWS students are from the Pacific Northwest, the university is also home to students from throughout the country and the world.

Many opportunities exist for students to interact, both professionally and socially, with each other. A variety of services and experiences are offered outside of the formal classroom and clinical settings. The main campus is located in a tranquil neighborhood in northeast Portland, only a short distance from the cultural richness and vibrancy of downtown Portland, as well as the natural beauty of the Columbia River Gorge, the Cascade Range, and the Oregon coast. With symphonies, jazz clubs, museums, kite boarding, skiing, rock climbing, sporting events, hiking, cycling, community races, campus clubs and activities, boating, vineyards, and gardens, students have plenty of recreational opportunities.

### Associated Student Body

The purpose of the Associated Student Body Student Council (ASB) is to provide a formal organization through which the professional, academic, and personal needs and interests of the students can be cooperatively represented and met. The ASB is composed of representatives from each class and elected officers. ASB supports student groups, the student newspaper (*The AXIS*), and funds other on-campus events such as the Quarterly BBQ, book sale, and Bagels Week. ASB meetings are open to all students.

### Student Ambassadors

Student ambassadors represent the UWS admissions and office of student services to prospective students. They also help during new student orientation, commencement, and the education forum. Being an ambassador is a fun way to share experiences. A student may become an ambassador upon completion of their program's second quarter courses. Ambassadors

must maintain a minimum GPA of 2.75 and have a desire to represent UWS. For more information, contact the office of admissions.

## **Student Groups**

Various student organizations—social, recreational, and professional—are organized through the office of student services and coordinated through the Associated Student Body (ASB). Anyone interested in becoming involved in student organizations should contact the office of student services for further information.

If an existing group is not meeting a student's interest, s/he should explore the option of proposing a new group. Contact student services for an application. Each student group must have a qualified advisor and be approved by the office of student services. Please refer to [Policy 9012 Recognition of Student Groups](#).

## **On-campus Employment**

UWS participates in the federal work-study program and provides other on-campus employment opportunities for students. The office of human resources sends regular email notices of available positions, which are also posted on the university website. Federal work-study provides part-time jobs for students with financial need, allowing them to earn money to help pay for educational expenses. Work-study positions are available throughout campus and generally range from 2-8 hours per week. Available work-study positions are posted on the financial aid board outside of the Chiro Café. To see if you are eligible, email the [office of financial aid](#) or call 503-847-2563.

## **Housing**

The university does not offer on-campus housing. The office of student services provides housing information and resources for Portland and surrounding areas near the university. Students can find information about local housing or find a roommate through the [classified ads](#) on the university website.

The UWS [roommate referral](#) system helps students looking for a roommate or students who wish to receive notice of available rentals. For more information, contact the office of student services.

## **Student Support Services**

### **Alumni Relations and Services**

The university is committed to providing tools and resources for students to succeed during their program and as they transition into professional practice. Through alumni services UWS offers personalized guidance, self-paced development courses and other resources, including the UWS Mentor Network, which connects students, alumni and other health care industry professionals. Students also have opportunities to attend on campus panel discussions and guest speaker events focusing on a variety of topics supporting business practice, as well as continuing education events, like our NW Symposium.

Get in touch and discuss how we can help support your success by emailing [alumni@uws.edu](mailto:alumni@uws.edu) or visiting Alumni Services.

For more information, students should visit [Career Services](#) to find resources for practice opportunities, as well as business, career, and professional website links.

### **Tutoring Program**

The university provides free tutoring services and open labs for students interested in additional assistance with courses or lab work. Tutoring is scheduled Monday through Friday through the office of student services. Labs are staffed with lab tutors and are generally drop in. Students should contact the office of student services for more information on how to request tutoring services or express interest in becoming a tutor.

### **Services for Students with Disabilities**

The University of Western States recognizes its responsibility to provide equal access to opportunities for persons with disabilities, under section 504 of the Rehabilitation act of 1973 and Title II of the Americans with Disabilities Act of 1990 as amended (2008). The staff and faculty work together to ensure students with disabilities have equal access to educational experiences.

Students receiving accommodations are expected to adhere to university policy and to make any requests for accommodation on a timely basis. For information on the documentation required by UWS to receive accommodations, please contact the office of student services.

### **Counseling Services**

Counseling services for students are available on campus free of charge for up to 12 visits. Students may contact [counseling@uws.edu](mailto:counseling@uws.edu) to schedule an appointment with an on-site counselor.



## Student Policies

All policies are subject to change. To review the most up-to-date policies, visit [Udocs](#) on the UWS website.

### Acceptable Use University Information Systems

As part of its educational mission, the University of Western States provides its students, faculty, trustees, and staff access to a variety of information systems, including but not limited to: email, Internet access, network file storage, websites, wired and wireless data networks, voice communications systems, computer labs, computer workstations, and network printers. These information systems, and all others provided by the university are intended for university-related purposes, including direct and indirect support of the university's instruction, research and service missions; university administrative functions; student activities; and the free exchange of ideas within the university community and among the university community and the wider local, national, and world communities. The use of these information systems is a privilege and not a right. Users of these information systems have access to valuable university resources, sensitive data, and to internal and external networks. Consequently, it is important for all users to behave in a responsible, ethical, and legal manner. For complete information, see [Policy 3601 Acceptable Use of Information Systems](#).

### Alcohol on Campus

[Policy 1008 - Drugs, Narcotics and Alcohol](#) specifies alcohol is not permitted at any on-campus student events, nor may the university or student groups sponsor alcohol at any student events held off campus.

### Bulletin Board Posting

All items posted on campus for any purpose must be approved in advance through the office of student services. All postings are valid for 30 days from the date of approval. Any items posted on bulletin boards on campus without the approval of the office of student services or items not removed after thirty days will be removed and discarded. Any individual or group found posting non-approved items on campus will be subject to disciplinary proceedings. Please note that the final decision to post an item rests with the university. In addition, the university reserves the right to limit posting to specific locations on campus.

### Children on Campus

Infants and children are not allowed in classrooms, laboratories, or other work areas of the university. Students are expected to make provisions for off-campus childcare during normal working hours. The office of student services can provide a list of childcare resources in our area. Please refer to [Policy 1021 Children on Campus](#).

### Copyright

Textbooks, reference works, journal articles, computer software, databases, and electronic documents are protected by copyright law. A student must either have an express or implied license to use copyrighted material or data, or be able to prove fair use as defined by the Digital Millennium Copyright Act of 1998 ([www.copyright.gov/](http://www.copyright.gov/)). Students and other users of UWS computers are responsible for understanding how copyright law applies to the use of electronic and printed resources. They may not violate the copyright protection of any of these resources. Downloading or distributing copyrighted materials without the permission of the copyright owner may be considered copyright infringement. Students and other campus users of copyrighted materials should refer to the [www.copyright.gov](http://www.copyright.gov) website and [Policy 1605 Use of Copyrighted Works in Education and Research](#) for further information.

### Dress Code

The UWS clinic system may establish a dress code for students providing or observing clinical services. Please refer to the Health Center Manual for requirements related to professional appearance.

### Drug and Substance Abuse

Under [Policy 1008 Drugs, Narcotics and Alcohol](#), abuse of alcohol, drugs, or other controlled substances by any campus community member will not be tolerated. Members of the campus community must conduct themselves in a manner that is consistent with the standards of the health therapy professions and with the stated mission and policies of the university.

Besides the obvious, direct effects of use and abuse of alcohol, marijuana, drugs, and other controlled substances, there are indirect or hidden costs as well. These include impaired learning, impaired interpersonal relationships, increased risk of accident and injury, unwanted sex or pregnancies, and increased risk of sexually transmitted disease.

Although substance abuse is the responsibility of the abuser, UWS will endeavor, whenever possible and to a reasonable degree, to identify substance abusers and assist them in obtaining the proper professional care. In any case of substance abuse, whether by student or employee, the university reserves the right to apply any lawful and appropriate sanction or to sever the relationship between the university and the individual.

Reports of substance abuse where a student's behavior or ability to function has been altered or the abuse is potentially harmful to the student or the community shall be given to the dean of enrollment and student services. Such reports

concerning faculty, staff, or administration shall be given to the chief administrative or personnel officer. A report may be provided by any campus community member or by persons not affiliated with the university. Such reports should be in writing, but may be oral. The report should contain the name of the offending campus community member and the date, place, and nature of the situation.

Upon receipt of a report regarding a purported substance abuser, the appropriate administrator will meet with the person and determine the necessary course of action, which may include, at the institution's discretion: no action, disciplinary warning, probation, suspension, voluntary leave of absence, or dismissal/termination. To resolve the situation in the best possible manner, a process will be followed so that the individual's interests are respected and the university's concerns are properly addressed. The university will, when possible, attempt to facilitate the rehabilitation process of the abuser by assistance in locating appropriate professional care.

Any student or employee of the university found to be using, possessing, manufacturing, or distributing controlled substances, marijuana, or alcohol on university property or at university-sponsored events, in violation of university policy or the law, shall be subject to disciplinary action in accordance with applicable laws or policies. Such disciplinary action includes, but is not limited to: suspension, termination of enrollment or employment, referral for prosecution, and/or the completion of an appropriate substance abuse assistance or rehabilitation program at the individual's expense.

All students and employees must notify the university of any criminal drug statute conviction for a violation occurring in buildings, facilities, grounds, or property controlled by the university within five days of such a conviction. The university will, in turn, notify the applicable federal agency of the conviction. Appropriate action will be taken within 30 days of a report to a conviction or violation of the drug-free workplace policy. [Please refer to Policy 1008 Drugs, Narcotics and Alcohol.](#)

### **Fundraising by Student Groups**

Student organizations desiring to make sales or take orders on campus must have permission from the office of student services and file a completed "student group fundraising" form. In all instances where the selling is to be a continuing project, the authorization to sell will be reviewed quarterly, with a specific focus on the justifications for selling and past operations. Please refer [to Policy 3001 Selling on Campus](#) and [Policy 9012 Recognition of Student Groups](#).

### **Guest Speakers**

To promote the professional exchange of intellectual ideas in the academic setting, the university welcomes guest speakers to present their respective positions and expertise to the campus community. [Policy 1011 Guest Speakers](#) applies to guest speakers invited to address students and/or employees outside of regularly scheduled classes.

All guest speakers are at the invitation of the president. Therefore, if students or organizations would like to bring a speaker to campus, they must make a written request through the office of student services prior to extending an invitation to the speaker. When a guest speaker has completed the approval process, s/he will be added to a list of approved guest speakers from which student groups, faculty, or administration may choose from to provide a presentation. When the guest speaker will be addressing the entire campus at a university event, the office of student services, in conjunction with the office of the president, will schedule the appropriate date, time, and location, and will provide timely notification of the event to the campus community.

Guest speakers are prohibited from marketing or promoting seminars, groups, or products in which they may have a personal or financial interest. Speakers may not claim, advertise, or otherwise assert a relationship between the institution and themselves or any organization that they may represent because they were invited to speak on campus. An invitation to speak at UWS does not imply that the university approves or endorses the views expressed by the speaker.

### **Immunizations**

[Policy 9010 Immunization Requirements for On-Campus Students](#) requires on-campus students to submit documentation of immunization to the office of student services prior to matriculation.

#### **Measles Immunization**

Oregon state law requires all on campus students born after January 1, 1957, to provide documentation of having received two doses of measles vaccine on or after their first birthday with a minimum of 30 days between doses. If the month and year of first dose are not available, documentation of the second dose in or after December 1989 must be provided. Further information related to this Oregon law is available from the office of student services.

#### **Hepatitis B Immunization**

Students training in health care disciplines have the potential to become exposed to blood and body fluids and are at risk for exposure to and possible transmission of vaccine-preventable diseases. Due to the nature of UWS programs that require participation in clinical labs, field experiences, and clinical internships, UWS requires students in these programs to submit documentation of hepatitis B immunization or acceptable exemptions.

## Non-Discrimination in Professional Practice

The ethical responsibility of health care professionals is to minister to the health care needs of their patients. UWS provides appropriate care to clinic patrons, regardless of race, color, gender, sexual orientation, marital status, national origin, national citizenship, religion, age, disability, veteran status, or health status. The term "health status" includes, but is not limited to, terminal illness, infection with hepatitis-B virus, or HIV. Interns in the clinics who discriminate against patients are subject to disciplinary action or dismissal.

## Selling on Campus

Representatives of non-UWS entities may not solicit or sell to students without permission from the office of student services or the vice president of finance and administration. Representatives of for-profit entities may not sell products on campus or at student events with the exception of products sold in conjunction with the UWS Bookstore or Continuing Education programs. Sales on the UWS campus are generally restricted to those where proceeds benefit the university, its affiliates, or other non-profit organizations. Faculty and staff members are expressly prohibited from taking orders from and/or selling to students on campus at any time. Please refer to [Policy 3001 Selling on Campus](#).

## Sexual Harassment or Discrimination

The University of Western States does not discriminate on the basis of race, color, gender, sexual orientation, marital status, national origin, national citizenship, religion, age, disability, or veteran status in its educational programs or activities.

Prohibited sex discrimination includes sexual harassment or violence in accordance with Title IX federal requirements. This includes conduct that is criminal in nature such as dating violence, domestic violence, sexual assault, rape, unwanted touching, and stalking. Please refer to [Policy 9015 Sexual Harassment/Discrimination](#) and [Policy 9001 Student Conduct](#).

Inquiries about the application of Title IX should be referred to the office of student services and Title IX coordinator, 2900 NE 132<sup>nd</sup> Ave, Portland OR 97230, 503-847-2559, [studentservices@uws.edu](mailto:studentservices@uws.edu) or to the U.S. Department of Education Office of Civil Rights <http://www2.ed.gov/about/offices/list/ocr/index.html>.

## Response to Harassment or Discrimination

In accordance with [Policy 9015 Sexual Harassment/Discrimination](#), any student who believes the actions or words of a UWS community member or outside agent constitute sexual harassment or other discrimination has a responsibility to report the concern as soon as possible to the Title IX coordinator or designated contact person/s appointed by the president.

All complaints of harassment and/or discrimination will be investigated promptly and in as impartial and confidential a manner as possible by the Title IX investigators.

Any faculty member or other university employee, student, or outside agent who is found after appropriate investigation to have engaged in sexual harassment or other discrimination toward a student will be subject to appropriate disciplinary action, depending on the circumstances, up to and including termination or dismissal from the university, in accordance with applicable policies, procedures, and/or collective bargaining agreement. In consideration of the university's commitment to protecting students from sexual harassment and discrimination, the university equally establishes that no student shall sexually harass or discriminate against any employee of the university.

## Tobacco and Marijuana Free Campus

As a health care institution, UWS is a smoke and tobacco free campus. Smoking or tobacco use, including e-cigarette devices, is not permitted anywhere on campus. Please refer to [Policy 1017 Tobacco and Marijuana-Free Campus](#).

## Social Media

Social media should promote the university's message and identity, and create a central hub for collaboration, interaction and information for prospective students, current students, alumni, and the general public. [Policy 9001 - Student Conduct](#) and the [UWS Social Media Guidelines](#) apply to social media communications. Therefore, UWS students and employees are expected to conduct themselves professionally in their communications and interactions on or off campus, which includes compliance with FERPA and HIPAA laws.

UWS reserves the right to review all comments on all UWS social media sites before they are posted, and to edit or delete them to preserve readability for other users. Please refer to [Policy 2503 Social Media](#).

## Student Conduct

The demonstration of personal and professional ethics and integrity are considered an integral part of the academic programs of the institution. Students are required to conduct themselves in a professional manner throughout their enrollment on and off campus.

The following list represents behaviors that are considered inappropriate under [Policy 9001 Student Conduct](#). The list is not all-inclusive. Violations of the expectations for student behavior that are generally accepted by the university faculty and administration may subject the student to disciplinary action including, but not limited to: warning, fines, restitution, probation, course failure, suspension, or dismissal. The university reserves the right to address any behavior it deems inappropriate.

### **The following behaviors or actions will not be tolerated:**

1. Disruption of the educational process (classes, labs, assemblies, seminars/workshops, registration, the operation of the university's clinics, etc.).
2. All forms of academic cheating, fraud and dishonesty, including but not limited to plagiarism, copyright violation, buying and selling course assignments and research papers, performing academic assignments (including tests and examinations) for other persons, unauthorized disclosure and receipt of academic information; inappropriate use of technology, and other practices commonly understood to be dishonest.
3. Falsification of identity whether in admissions application, or course enrollment, and/or on a test/examination or assignment including any distance or online work.
4. Lying or falsification of academic or official records including applications, transcripts, reports, papers, examinations, registration or financial aid materials, forms, checks, clinic records, etc.
5. Adjustment or other treatment of students or non-students in a non-authorized setting (i.e., outside of the supervised clinic facilities).
6. Damage to or destruction of university property. Unauthorized entry to or use of university property or facilities including, but not limited to, buildings, grounds, files, offices, records, equipment, or unauthorized possession of keys to same.
7. Theft of property whether university property or another's personal property.
8. Disrespect or lack of consideration for fellow students, staff members, faculty members, administrators, or patients. Students who have disagreements or disputes with fellow students, faculty members, or administrators are to make every reasonable attempt to resolve the situation in a calm and professional manner. Students are to make use of established appeal and grievance (complaint) procedures.
9. Verbal abuse or use of profanity.
10. Indecent, disorderly, lewd or obscene conduct.
11. Personal threat, coercion or intimidation; physical/sexual harassment, physical assault or injury.
12. Failure to comply with official requests or university policies.
13. Smoking and other forms of tobacco and/or marijuana use on campus.
14. Being under the influence of alcohol or illicit drugs while on-campus or off-campus at university sponsored clinical or educational activities.
15. Unauthorized placement or removal of postings on campus.
16. Gambling on campus.
17. Conviction of a felony while enrolled.
18. Lack of personal hygiene and personal grooming, unkempt and/or otherwise inappropriate attire. Students are to maintain a level of cleanliness, grooming and appearance that is consistent with standards of a health care professional. Additionally, students in clinical rotations are to comply with the dress code outlined in applicable clinic manuals under the discretion of the clinic faculty and administration.

Violations of the student conduct policy are to be reported in writing to the dean of enrollment and student services. Please refer to [Policy 9009 Student Complaint \(Grievance\)](#).

**Related Policies:** [Policy 1008 Drugs, Narcotics and Alcohol](#)  
[Policy 1017 Tobacco and Marijuana-Free Campus](#)  
[Policy 1225 Involuntary Withdrawal \(Emotional/Psychologically Disturbed Students\)](#)  
[Policy 9009 Student Complaint \(Grievance\)](#)  
[Policy 9015 Sexual Harassment/Discrimination \(Students\)](#)  
[Policy 9022 Student Appeal](#)

### **Student Appeal**

An appeal is a request for an exception to policy or a request to vacate a decision or the proposed disciplinary action of a faculty member, committee, or administrator in the application of university policy. Disciplinary actions include, but are not limited to: warning, fines, restitution, probation, suspension, or dismissal. [Policy 9022 Student Appeal](#) details the university's policy and procedures for student appeals. Contact the dean of enrollment and student services for assistance.

**Note:** Please refer to [Policy 1211 Grade Appeal](#) for appeal of final course grades or other final comprehensive evaluation grade.

## Student Complaints/Grievances

A complaint, or grievance, is a formal written criticism by a student pertaining to the conduct of a student or a member of the university faculty, staff, governing board, or administration. A complaint may also address an individual's dissatisfaction with the conduct of another individual or the quality of the university's educational programs or services.

The rights of students are protected. Retaliatory or adverse action may not be taken against a student for filing a complaint. [Policy 9009 Student Complaints \(Grievance\)](#) details procedures for student complaints. Students should contact the dean of enrollment and student services, or any other university administrator, with questions about the policy or procedure. Anonymous complaints cannot be accepted.

In addition to the university's complaint policy and procedure, complaints regarding the university or specific programs may be addressed to:

Institution: Northwest Commission on Colleges and Universities  
8060 165<sup>th</sup> Avenue NE, Suite 100  
Redmond, Washington 98052  
Office: (425) 558-4224 Fax: (425) 376-0596  
[www.nwccu.org](http://www.nwccu.org)

DC Program: Council on Chiropractic Education  
8049 North 85th Way  
Scottsdale, Arizona 85258-4321  
Office: (480) 443-8877 - Fax: (480) 483-7333  
[cce@cce-usa.org](mailto:cce@cce-usa.org); [www.cce-usa.org](http://www.cce-usa.org)

Massage  
Program: Commission on Massage Therapy Accreditation (COMTA)  
5335 Wisconsin Avenue NW, Suite 440  
Washington, DC 20015  
Office: (202) 895-1518 Fax: (202) 895-1619  
[info@comta.org](mailto:info@comta.org); [www.comta.org](http://www.comta.org)

# Health and Recreational Facilities

## Campus Health Center

The Campus Health Center (CHC) provides healthcare and wellness services to UWS students, faculty, staff and families, as well as the local community. This facility serves as a training center for student interns, who provide care under the direct supervision and mentorship of licensed faculty attending physicians. Services include health histories and examinations; radiology and clinical laboratory services; a variety of treatment modalities; health risk assessment; and nutritional, lifestyle, and wellness counseling services. Additionally, reduced-fee massage services are available to UWS students. Call 503-255-6771, or visit the CHC for information about eligibility, availability, and fees.

## Recreational Facilities

The university facilities include the gymnasium, weight and fitness facilities, and outdoor grounds. The large gymnasium space serves as a multi-purpose area used for fitness activities and large group events. Beautiful campus grounds include spacious flat lawns with views of Mt. Hood and Mt. St. Helens. The lawns are used for soccer, yoga, Frisbee, volleyball, touch football, and kickball. The southeast corner of the campus is home to a labyrinth for reflection and meditation.

# Bookstore and Spinal Tap Coffee Kiosk

## Supplies and Equipment

The bookstore offers materials for all of the university's programs, including chiropractic and massage supplies, sports science equipment, and educational materials on a wide range of conservative health care topics. The staff is available to assist students and alumni in finding materials and supplies that will enhance their educational experience and help graduates build their practice. Off-campus students and alumni may order textbooks, UWS logo items, and other supplies [online](#).

## Food and Beverages

The bookstore offers a selection of snacks as well as grab-and-go food items prepared in the Chiro Café. Adjacent to the bookstore, the Spinal Tap coffee kiosk serves coffee and other specialty beverages year round.

## Textbook and Supplies List

A list of required and recommended books and supplies is posted on the [UWS Bookstore](#) website.

## Bookstore Refunds

Books and merchandise may be returned with a receipt and in the original condition the book was purchased, within five business days of purchase.

# Other Services

## Chiro Café Dining

The café is located in the main administration building and is open Monday-Friday for breakfast and lunch. The café menu includes daily breakfast and lunch specials and a salad bar, sandwich bar, and a selection of "grab and go" items. Vegetarian breakfasts and lunches are also available. The Chiro Café menu is emailed to students and employees each week. The café focuses on preparing healthy, balanced meals in keeping with the nutritional tastes of the campus community. Meal pricing is competitive with pricing at other universities and other local options.

## The Spinal Tap Coffee Kiosk

Located just outside the bookstore is the Spinal Tap coffee kiosk. This popular spot is open on weekdays, providing coffee enthusiasts with tasty treats and snacks including espresso drinks, coffee, Italian sodas, tea, smoothies, baked goods, and juices. The coffee is organic; dairy products are rBST free; soy and almond milk substitutes are available, as well as sugar-free syrups.



## Lost and Found

All lost and found items are to be turned in to the bookstore. To turn in items found or inquire about lost items reach out to a bookstore employee during normal operating hours. You may also call 503-251-5763 or email at [bookstore@uws.edu](mailto:bookstore@uws.edu) with your inquiries. Items in lost and found will be kept for at least 30 days. Missing items reported will stay on the lost and found Database for at least 60 days.

## Student Lockers

All students interested in using a locker may request a locker assignment through the office of student services. The student services staff assigns lockers and combinations. The user of the locker assumes all risks associated with its use. The university is not responsible for the theft or loss of any materials. Students must ensure that their lockers are secured.

## Campus Safety and Security

UWS is committed to providing students with a safe environment in which to learn. The university has established a number of policies and safety measures to keep students, faculty, staff, and campus visitors safe and well informed about campus safety. These protocols include the campus alert system, campus security, and counseling support.

All members of the UWS community are expected to report suspicious activities, criminal actions, and emergencies occurring on campus. Prompt reporting enhances campus safety for all concerned. UWS Campus Public Safety provides security coverage seven days a week.

The university prepares an annual security report to comply with the Crime Awareness and Campus Security Act (aka Clery Act) of the Higher Education Act. The report is located on [Campus Safety](#) page of the UWS website. The page includes a link to the annual Campus Safety and Security Survey, which includes data collected from campus public safety sources and Clery crime statistics provided by the Portland Police Bureau.

## Pets on Campus

Non-service animals are not permitted on campus. Fines and other sanctions may be assessed for students who bring animals on campus, including those who leave pets in cars parked on campus.

## Sexual Assault and Violence Prevention Resources

In keeping with federal and state law requirements, it is the policy of the college that sexual assault, sexual exploitation, and domestic violence will not be tolerated. Nonconsensual sexual conduct and other forms of sexual violence can be traumatizing and detrimental to a person's learning experience and overall health, and have no place in our community.

## Campus Warning and Notification System

Everyone in the UWS campus community, including family members, can sign up for the campus alert system, called E2Campus. UWS uses E2Campus to provide timely alerts regarding a variety of incidents, which may occur on campus, such as weather-related notifications, fire drills, unexpected water shutdown or any dangerous situations. This system is used to deliver important information by cell phone text or email. There is no charge for signing up; however your cell phone carrier's standard text messaging rates still apply. UWS encourages students, family members, and staff to [sign up](#). Note that you must re-register with the E2Campus every other year. Students and employees at Chemeketa Community College are encouraged to sign up for alerts at that campus. <http://entry.inspironlogistics.com/chemeketa/wens.cfm>.

## Timely Warning Notification

In accordance with [Policy 3019 Timely Warning Notification](#), UWS will issue a campus alert in the event of a crime or emergency. Additional information regarding the incident will be posted on the UWS website.

## Campus Closings

Employees and students are urged to listen to the radio or check the UWS website on mornings when weather or other conditions are hazardous. Campus closings are also announced over the campus notification system.

If a late opening is announced, UWS employees and students are expected to report for work or classes at the announced time. Even though the campus may be open, each person is responsible for deciding if weather conditions at their residence or on the route to UWS make it unsafe to travel to campus. Please refer to [Policy 3020 Closing due to Inclement Weather or Emergency](#).

## Impact of Campus Closings on Exams

If exams are scheduled when the university is closed, exams will be rescheduled. If the university opens late and exams are scheduled to begin during the period the university is closed, only those exams during this period will be rescheduled. All other exams will take place as scheduled.

## Emergencies

Call 9-1-1

Call 2-1-1 from any campus phone

## Non-Emergencies

In non-emergency situations, report suspicious activities, theft, vandalism, or safety concerns to UWS Campus Public Safety at 503-206-3206, ext. 3206 on campus. Please be sure to complete an incident report.

Problems that pose a risk of injury, such as icy sidewalks, should be reported to campus maintenance at 503-206-3206 or via email to [maintenance@uws.edu](mailto:maintenance@uws.edu).

In non-emergency situations, students and employees injured on campus should go to the Campus Health Center. Both students and employees should complete an incident/injury/accident report.

[Accident/Incident/Injury Report](#) forms are available in student services, the Campus Health Center, campus safety, bookstore, human resources and on Udocs on the UWS website under Emergency and Safety.

## Safety Awareness and Crime Prevention

Part of crime prevention is individual safety consciousness and awareness of one's personal environment. The university encourages everyone to follow crime prevention measures, which can contribute to the safety and security of the UWS community.

- Students and employees should wear or carry their UWS identification badge at all times.
- Do not park in isolated areas; move your car during the daylight to a close location if you expect to leave campus after dark.
- At night, walk in well-lighted areas, in groups, and avoid short cuts and deserted areas. Students and staff should call Campus Public Safety to provide a safety escort, if desired.
- Lock your car immediately upon entrance to or exit from your vehicle.
- Keep your car keys and all identifying information with you at all times.
- Do not leave valuable items in your car; instead, leave valuables at home.
- Do not carry more cash than necessary, and do not advertise how much you have.
- Do not leave personal property unattended anywhere on campus. Keep your locker locked, and do not store valuables or your ID in your locker.
- Do not bring any kind of weapon onto UWS property. Firearms and other weapons are prohibited. Violators are subject to disciplinary action.
- Never confront someone suspicious. Call 9-1-1 from a safe location.
- If anything makes you feel unsafe or threatened, call 9-1-1, call Campus Public Safety at ext. 3206, and/or speak to UWS campus personnel.

Safety and crime prevention are of utmost importance to the campus community. During normal business hours, UWS will be open to students, employees, contractors, guests, and invitees. Please contact Campus Public Safety during non-business hours to access campus facilities. Please note, UWS does not maintain any campus residences for students.

## Weapons

[Policy 1018 Weapons on Campus](#) prohibits firearms and other weapons on campus. A weapon is any firearm or implement as defined by Oregon statutes. Specifically, students, employees, and others performing services for the university are prohibited from carrying, possessing, storing in a vehicle, or using guns or other dangerous weapons or devices for any purpose at any time on university premises. Weapons and other dangerous devices are also prohibited off university premises while on university business or at university-sponsored events. Persons who possess a concealed-weapons permit are requested voluntarily to comply with the intent of this policy.



## W.A. Budden Library

The W.A. Budden Library supports all academic programs of UWS by delivering information services in a variety of ways. Beyond the print collection in the library stacks, E-books, databases, streaming media, and full-text journals are available directly from the online catalog and the web page links 24/7 from on- and off-campus.

The library building, which is enabled with secure Wi-Fi, is open seven days a week. Comfortable study space is available for both quiet and group learning in separate parts of the building. Students may enjoy food and beverages in the library with the provisos set forth in the food policy below.

The print collection in the open stacks is comprehensively chiropractic, medical science, sports medicine, integrative medicine, and manual therapy literature and includes a wide range of materials about alternative and complementary healing modalities, nutrition, and wellness practices. A limited number of copies of all required and recommended texts are available in the reserve stacks, located behind the circulation desk. However many titles are available electronically through the online public access catalog. Click on the "catalog" button from the library web page to find e-books.

The audiovisual collection consists of DVDs, streaming media, and anatomical models. These are available for either check out or use in the Library. Steaming videos can be watched from anywhere after authentication. The library maintained databases include Medline Complete, SportDiscus, Primal Pictures Anatomy TV, Netter's Images, CINAHL, AMED, and the Cochrane Library. Other databases include DynaMed, Natural Medicines, and ConsumerLab.com. The library's electronic full-text subscriptions are linked to the external web resources PubMed and Google Scholar. All UWS students are eligible for and encouraged to use a RefWorks citation management account.

Librarians are available to help with research topics, computer use, database searching, and locating information or library materials, including full-text retrieval. Research guides on a variety of pertinent topics, including FAQs and tutorials, are available from a link on the library web page or directly at <http://researchguides.uws.edu/>.

Material requests are gladly received. Suggestions and requests for library materials purchases can be given to the librarians or emailed to [librarian@uws.edu](mailto:librarian@uws.edu).

Library Hours	
Monday-Thursday	7 am - 10 pm
Friday	7 am - 6 pm
Saturday	9 am - 5 pm
Sunday	12 pm - 8 pm
Break Weeks:	
Monday-Friday	9 am - 5 pm

Contact Information	
Circulation Desk	503-251-5752
University Librarian	503-251-5757
Reference Librarian	503-206-3202
Inter-Library Loan	503-847-2596

## Library Services

<b>Fax</b> Available to students free of charge.	<b>Notary</b> Notary services are available free of charge to students, by appointment.
<b>Printing</b> High-speed duplex printing and scanning free. This policy may change with notice. UWS reserves the right to limit quantity.	<b>Wi-Fi</b> Building is securely enabled with broadband Wi-Fi.
<b>Copies</b> The library has three copiers. One is fitted with a binder minder to protect the spines of books from damage. High-speed copying and color scanning is free. UWS reserves the right to change this policy without notice.	<b>Computers</b> There are 33 computer terminals for student use in quiet and group study areas.

## Inter-library Loan

The W.A. Budden Library is committed to providing all materials students need for academic success and faculty reference. If we do not own a book, video, or article that a student needs, we will borrow it from another library. Article requests are often fulfilled in a matter of hours, books may take a few days to complete. Returns are made to the local circulation desk and will be managed by library staff. ILL service is available to students and faculty free of charge.

## Reciprocal Borrowing

The library has reciprocal borrowing agreements with the National College of Natural Medicine (NCCM), Oregon College of Oriental Medicine (OCOM), and Oregon Health and Sciences University (OHSU). This means students may check out materials held in the collections of these other schools either by requesting through the shared online catalog for pick-up at UWS or by going to those institutions directly with valid UWS identification. To view the collections of these other schools, select "PAHL Libraries" on the online catalog search bar. The librarians at the W.A. Budden Library are available to assist in the requesting of materials from these sister schools and will gladly handle returns. Late fines and replacement costs are levied at the lending library's policy.

Massage students at the Chemeketa Community College site have borrowing privileges from both Chemeketa Library and the University of Western States. UWS maintains a special massage collection including all required and recommended textbooks at the Chemeketa Library. Students may use the most convenient location for checking out materials.

## Materials Check Out/Lending

Books in stacks	Check out for two weeks
New Books	Check out for two weeks
Reserve Books*	Overnight or library use only
E-books	Check-out while in use online
Unbound Journals and Bone Models	Check out for one day
Human Bones	Library use only
Bound Journals	Library use only
DVDs	One day or one week
Streaming Media	Available 24/7 through online catalog, no check out necessary
Archival Materials	Library use only

\*All required texts are on Reserve

## Special Limits on Materials

### Overnight checkout

Return next day by 10 a.m. (Massage students 10 p.m.) On Friday, overnight items are checked out until Monday. On the last day of finals week, overnight items may be checked out for the term break.

### One-day checkout

Return next day, any time before closing.

### In Library Use

Two-hour checkout.

## Distance Students

Verified distance students Distance students may borrow up to 3 print materials at a time from the UWS Library collection (including required texts from the reserves collection). These books will be mailed to the student for a **four week (28 days)** check out period (which includes initial shipping time) and cannot be renewed. Distance students may borrow up to 3 media items from the UWS Library collection at a time. These materials will be mailed to the students for a **two week (14 days)** check out period (which includes initial shipping time) and cannot be renewed. Students must return the library items postmarked by the due date. Students can place holds on books and videos using the [catalog](#). If you need to borrow a required text from the reserves collection, please email the request to [library@uws.edu](mailto:library@uws.edu).

No matter when the material is checked out, all material must be returned **before** the first day of class the following quarter. The Library does not circulate print journals or archival materials to distance students.

Print materials will shipped via USPS Media Mail to students at no charge. Students should save the enclosed return shipping label and consider saving the original mailing envelope/box for returns. Students are responsible for cost of shipment to return library materials. Students are also liable for library materials from the time they receive them to the time the materials arrive back at the library. The UWS Library's replacement policy will apply to any items lost or returned damaged. The replacement charge is the current replacement cost plus a \$25.00 per item processing fee. Late fees are assessed at \$.25 a day per item.

### **Renewals**

All materials may renew twice, unless another patron has requested the item. Renewals may be done through the online catalog, in person, or by phone (503-251-5752). When both renewals have been used, items must be returned to the library. After 24 hours, the item becomes available for check out again.

Late return fines accrue at 25¢ per day for regular materials and 20¢ per hour for reserve materials. Unpaid fines over \$5.00 are submitted to the office of financial services at the end of term. Return reminders and overdue notices are sent as a courtesy automatically to campus email addresses.

### **Lost or Damaged Materials**

Lost or damaged materials are charged at replacement or repair cost, plus handling fees. Unpaid fees are sent to the office of financial services at the end of term. Library accounts must be up to date with materials returned and fines paid prior to graduation.

## **General Library Policies**

### **Computer Use**

Courteous awareness of others waiting to use library computers at peak times is encouraged. Students should not use social network sites for long periods while others are waiting. Please refer to [Policy 3601 Acceptable Use of Information and Communications Systems](#).

### **Food in the Library**

Students are allowed to eat non-disruptive food in the library (e.g., dry foods that are not crunchy and that do not have a strong odor). Students are also allowed to bring drinks into the library, preferably in spill-proof covered containers. Students are asked to help maintain the cleanliness of the library facilities and the integrity of the library materials. Please do not leave food waste (wrappers, lunch sacks, coffee cups, etc.) in library waste receptacles.

### **Quiet Zone**

The entire west end of the library is a designated quiet zone. Please do not use this area for group study or receiving phone calls. As adult students in a professional program, peer-to-peer respect, consideration, and communication are expected behaviors. Library staff will respond to egregious noise in the Quiet Zone if a request for quiet from a fellow student has been ignored. Because the library building is multi-purpose, those students that require absolute silence for studying can try the noise canceling headphones or earplugs available at the circulation desk.

# Administration

## Board of Trustees

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## Administration

Joseph E. Brimhall, DC, FICC, President  
BS, 1979, Logan College of Chiropractic; DC, 1981, Logan College of Chiropractic

Eric S. Blumenthal, MBA, VP Finance and Administration  
BS, 1982, Boston College; MBA, 1995, University of Massachusetts

William Borman, PhD, Dean, College of Chiropractic  
BS, 1987, University of Wisconsin-Eau Claire; PhD, 1994, Medical College of Wisconsin

Timothy Foley, EdD, MBA, Dean, Enrollment and Student Services  
BS, 2003, Kansas State University; MBA, 2005, University of Phoenix;  
EdD, 2011, United States Sports Academy

Marion Willard Evans, Jr., DC, PhD, Executive VP and Provost  
DC, 1986, Logan College of Chiropractic; BGS, 1999, Indiana University;  
MA, 2003, The University of Alabama; PhD, 2006, The University of Alabama and The University of Alabama at Birmingham

Stanley Ewald, DC, MPH, Associate VP Clinical Internship and Assessment  
BS, 1984, California State Polytechnic University, Pomona;  
DC, 1992, Los Angeles College of Chiropractic; MPH, 2001, University of California Los Angeles

Michael Haneline, DC, MPH, FICR. Dean, Graduate and Professional Studies  
BA, 1971, Los Angeles College of Chiropractic; DC, 1971, Los Angeles College of Chiropractic;  
MPH, 2003, California College for Health Sciences-Independence University

Laura Lamm, DC, VP Institutional Effectiveness  
BS, 1984, Winthrop University; DC, 1990, Sherman College of Chiropractic

Rosalie Messina, MPA, Associate VP Community Relations  
BA, 2002, Portland State University; MPA, 2007, Portland State University

Joseph Pfeifer, DC, VP Clinic Affairs  
BS, 1981, State University of New York; DC, 1984, New York Chiropractic College

Peter Szucs, MAW, LMT, Dean, Undergraduate Studies  
BAS, 2004, Siena Heights University; MAW, 2010, Chatham University

## Research

Mitchell Haas, MA, DC, Associate VP Research  
BS, 1975, State University of New York, Albany; MA, 1978, University of California, Berkeley;  
DC, 1986, Western States Chiropractic College

## Administrative Staff

Kathleen Cannon, BS	Director, Human Resources
Michelle Dodge, MEd	Registrar
Alisa Fairweather, MPH	Director, Post-Graduate and Continuing Education
Tim Foley, EdD	Dean, Enrollment and Student Services
Jim Friscia, MS	Director, Online Education and Learning Technology
Peter Goss, MS	Director, Financial Aid
Beverly Harger, DC, DACBR	Director, Diagnostic Imaging
Lisa Lopez, CPA	Director, Business Affairs and Controller
Owen Lynch, DC	Director, Health Centers of UWS - Downtown
Sara Mathov, DC, DACBR, ATC	Director, MS Exercise and Sports Science Program
Aaron Montgomery, DC	Assistant Clinic Director, Gresham Integrated Care
Megan Nugent, MA	Director, Public Relations, Communications, and Marketing
Eric Polgar, MBA, LMT	Director, Massage Therapy Program
Daniel Redwood, DC	Director, MS Human Nutrition and Functional Medicine
Erick Ruiz	Interim Director, Information Technology
Tony Santiago, BS	Interim Director, Facilities and Campus Public Safety Officer
Mary Stafford, BA	Director, Admissions
Erika Stanley, BFA	Alumni and Community Relations Manager
Janet Tapper, MLS	University Librarian

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### DC Program - Basic Sciences

#### **Burnham, Kara**

##### **Chair, Basic Sciences**

Associate Professor, Department of Basic Sciences

BA, Baylor University, 1992

MS, Baylor University, 1994

PhD, Texas Woman's University, 1998

#### **Gallegos, Jayme**

Assistant Professor, Department of Basic Sciences

BS, University of Arizona, 2000

BA, University of Arizona, 2001

PhD, Oregon Health and Science University, 2008

#### **Herrin, Sean**

Associate Professor, Department of Basic Sciences

BA, Western State College of Colorado, 1989

DC, Western States Chiropractic College, 1992

CCSP, American Chiropractic Board of Sports Physicians, 2007

#### **Kaminski, Mark**

Professor, Department of Basic Sciences

BS, Washington State University, 1975

BA, University of Washington, 1976

MS, Northwestern University, 1979

#### **Major, Christine**

Assistant Professor, Department of Basic Sciences

BS, University of Massachusetts, 2005

MS, University of Massachusetts, 2007

MS, University of Western States, 2013

DC, University of Western States, 2013

#### **Taliaferro, Steven**

Assistant Professor, Department of Basic Sciences

BA, University of Tennessee, 1990

DC, Western States Chiropractic College, 2001

MS, University of Western States, 2013

#### **Williams, Cortny**

Assistant Professor, Department of Basic Sciences

BS, Oregon State University, 2001

PhD, Oregon Health and Science University, 2006

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### DC Program - Chiropractic Sciences

#### **Agresta, Joel**

Instructor, Department of Chiropractic Sciences

AB, Fairfield University, 1973

BS, Howard University, 1977

PT, Howard University, 1977

DC, Western States Chiropractic College, 1983

CCSP, American Chiropractic Board of Sports Physicians, 2011

#### **Baranick, Karen**

Assistant Professor, Department of Chiropractic Sciences

BS, Oregon State University, 2004

DC, University of Western States, 2009

#### **Bhalerao, Shireesh**

##### **Chair, Chiropractic Sciences**

Associate Professor, Department of Chiropractic Sciences

BS, University of Saskatchewan, 1992

DC, Western States Chiropractic College, 2000

CCSP, American Chiropractic Board of Sports Physicians, 2007

MCR, Oregon Health & Science University, 2013

#### **Cummins, Catherine**

Associate Professor, Department of Chiropractic Sciences

BS, Millikin University, 1986

BS, National College of Chiropractic, 1989

DC, National College of Chiropractic, 1992

DACBO, American Board of Chiropractic Orthopedists, 1993

CSCS, National Strength and Conditioning Association, 2002

DACBO, American Board of Chiropractic Orthopedists, 2004

#### **Laurer, Ted**

Assistant Professor, Department of Chiropractic Sciences

BS, Mount Saint Mary's College, 1979

DC, Western States Chiropractic College, 1989

**Mitchell, Betsy**

Assistant Professor, Department of Chiropractic Sciences  
BA, University of Maine, Fort Kent, 1992  
DC, Western States Chiropractic College, 1999  
DACBO, American Board of Chiropractic Orthopedists, 2006  
CCSP, American Chiropractic Board of Sports Physicians, 2009

**Panzer, David**

Instructor, Department of Chiropractic Sciences  
DC, Western States Chiropractic College, 1983  
Diplomate, American Board of Chiropractic Orthopedists, 1992

**Partna, Lester**

Associate Professor, Department of Chiropractic Sciences  
DC, Western States Chiropractic College, 1989

**Perham, David**

Assistant Professor, Department of Chiropractic Sciences  
BA, Hobart College, 1987  
DC, University of Western States, 2010

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**DC Program - Clinic Affairs**

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**DeLapp, Daniel**

Clinical Practitioner, Department of Clinic Affairs  
BS, University of California, Davis, 1982  
DC, Los Angeles College of Chiropractic, 1986  
DABCO, Los Angeles College of Chiropractic, 1990  
L.Ac., Oregon College of Oriental Medicine, 1996,  
ND, National College of Naturopathic Medicine, 1997

**Hirsh, Henry**

Technician II, Department of Clinic Affairs  
R.T.R., Illinois Masonic Medical Center, 1976

**Roberts, Anita**

Clinical Practitioner, Department of Clinic Affairs  
BA, University of Washington, 1975  
DC, Palmer College of Chiropractic, 1980

**Tallman, Kristine**

Clinical Practitioner, Department of Clinic Affairs  
BS, Regents College of New York, 2000  
DC, Palmer College of Chiropractic, 2001

**Williams, Devin**

Clinical Practitioner, Department of Clinic Affairs  
BSN, Hardin Simmons University, 2010  
DC, Western States Chiropractic College, 2006  
MSN, Samford University, 2013

**Reynolds, Amy**

Clinical Practitioner, Department of Clinic Affairs  
DC, University of Western States, 2006

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**DC Program - Clinical Education**

---

**Lady, Suzanne****Chair, Clinical Education**

Assistant Professor, Department of Clinical Education  
BA, University of Arizona, 1991  
CMT, Healing Arts Institute, 1992  
DC, Western States Chiropractic College, 1997

**Lambert, Chad**

Assistant Professor, Department of Clinical Education  
BS, Central Washington University, 1999  
DC, Western States Chiropractic College, 2003

**LeFebvre, Ronald**

Professor, Department of Clinical Education  
BA, Loyola University, 1972  
MA, University of California, Los Angeles, 1973  
DC, Cleveland College of Chiropractic, 1983

**Nordeen, Jenny**

Assistant Professor, Department of Clinical Education  
BS, University of North Carolina-Wilmington, 2000  
MD, UMDNJ Robert Wood Johnson Medical School, 2007

**Petzing, Karen**

Assistant Professor, Department of Clinical Education  
BS, National College of Chiropractic, 1978  
DC, National College of Chiropractic, 1980

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**DC Program - Clinical Internship**

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**Armington, Amanda**

Assistant Professor, Department of Clinical Internship  
BS, Michigan State University, 2001  
DC, University of Western States, 2006

**Ginter, Lorraine**

Assistant Professor, Department of Clinical Internship  
BS, California State University, 1976  
DC, Western States Chiropractic College, 1988

**Hatch, Shawn**

Assistant Professor, Department of Clinical Internship  
BA, Southern Utah University, 2002  
DC, Western States Chiropractic College, 2006  
Diplomate, American Chiropractic Board of Sports Physicians, 2011

**Ondick, Ryan**

Assistant Professor, Department of Clinical Internship  
DC, Western States Chiropractic College, 2001  
CCSP, American Chiropractic Board of Sports Physicians, 2007

**Strange, James**

Assistant Professor, Department of Clinical Internship  
DC, Western States Chiropractic College, 2007  
BS, University of Western States, 2011  
CCSP, American Chiropractic Board of Sports Physicians, 2012  
MS, University of Western States, 2014

**Tarnasky, Michael**

Assistant Professor, Department of Clinical Internship  
 BA, Brigham Young University, 1976  
 DC, Western States Chiropractic College, 1982

**DC Program - Clinical Sciences**

---

**Baffes, Laura**

Associate Professor, Department of Clinical Sciences  
 BS, National College of Chiropractic, 1990  
 DC, National College of Chiropractic, 1992  
 CCSP, American Chiropractic Board of Sports  
 Physicians, 1995

**Corll, David**

Adjunct Faculty, Department of Clinical Sciences  
 BS, Western States Chiropractic College, 2000  
 DC, Western States Chiropractic College, 2000

**Crupper, Mia**

Assistant Professor, Department of Clinical Sciences  
 BA, University of Hawaii, Manoa, 2000  
 LMT, Honolulu School of Massage & Hawaiian Island  
 School of Massage, 2000  
 ND, National College of Naturopathic Medicine,  
 2005  
 ACNO, Certified Naturopathic Midwife, Certificate  
 in Natural Childbirth, 2006

**Crupper, Michael**

Adjunct Faculty, Department of Clinical Sciences  
 ND, National College of Naturopathic Medicine,  
 2005

**Gerber, James**

Associate Professor, Department of Clinical Sciences  
 BA, University of California, Santa Barbara, 1974  
 MS, University of Bridgeport, 1987  
 DC, Western States Chiropractic College, 1981  
 Diplomate, American Board of Chiropractic  
 Orthopedists, 1994  
 Diplomate, American Chiropractic Board of  
 Nutrition, 1996

**Hoffman, Lisa**

Associate Professor, Department of Clinical Sciences  
 BS, Western States Chiropractic College, 1992  
 DC, Western States Chiropractic College, 1994  
 DACBR, Western States Chiropractic College, 1997

**Hoyer, Dennis**

Associate Professor, Department of Clinical Sciences  
 BS, University of South Carolina, 1973  
 BS, University of Pittsburgh, 1976  
 MT(ASCP), American Society of Clinical  
 Pathologists, 1976  
 BS, National College of Chiropractic, 1979

**Jensen, Clyde**

Adjunct Faculty, Department of Clinical Sciences  
 BS, Brigham Young University, 1970  
 MS, University of North Dakota, 1973  
 PhD, University of North Dakota, 1974

**McMillan, Kristin**

Adjunct Faculty, Department of Clinical Sciences  
 BS, University of Western States, 2011  
 DC, University of Western States, 2013

**Peters, Allen**

Adjunct Faculty, Department of Clinical Sciences  
 BS, University of Georgia, 1981  
 MS, Boston University, 1993  
 JD, Florida State University, 1993

**Rhinewine, Joseph**

Adjunct Faculty, Department of Clinical Sciences  
 BA, Oberlin College, 1992  
 MA, Kent State University, 1999  
 PhD, Kent State University, 2004

**Schultz, Gary****Chair, Clinical Sciences**

Professor, Department of Clinical Sciences  
 BS, National College of Chiropractic, 1983  
 DC, National College of Chiropractic, 1985  
 DACBR, Los Angeles College of Chiropractic, 1988

**Stecher, Timothy**

Assistant Professor, Department of Clinical Sciences  
 BS, University of California, 1991  
 DC, Western States Chiropractic College, 1996  
 DACBR, Western States Chiropractic College, 1999  
 CCSP, American Chiropractic Board of Sports  
 Physicians, 2001

**Massage Therapy Program**

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**Belokonny, Mark**

Lecturer, Massage Therapy program  
 BA, Central Michigan University, 1977  
 M.Div., Western Seminary, 1980  
 D. Min., Biola University, 1993

**Dorsey, Rayna E.**

Clinical Supervisor, Massage Therapy program  
 Massage Therapist, East-West College of Healing  
 Arts, 1990

**Ebling, Carrie**

Clinical Supervisor, Massage Therapy program  
 BS, Florida State University, 1997  
 Massage Therapist, Florida School of Massage, 1999  
 DC, Western States Chiropractic College/University  
 of Western States, 2008

**Steinmetz, Erich**

Adjunct Faculty, Massage Therapy program  
 Massage Program, East-West College of the  
 Healing Arts, 1999  
 BS, Oregon State University, 2005

**Vidalis, Sofia**

Lecturer and Clinical Supervisor, Massage Therapy  
 Program  
 Massage Therapist, Maui School of Therapeutic  
 Massage, 1994

## **Exercise and Sports Science Department**

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### **Ackerman, George**

Adjunct Faculty, Exercise and Sports Science  
BA, Florida Atlantic University, 1999  
MS, Lynn University, 2001  
MBA, Nova Southeastern University, 2003  
JD, Nova Southeastern University, 2003  
MS, Nova Southeastern University, 2006  
PhD, Capella University, 2012

### **Brown, George**

Adjunct Faculty, Exercise and Sports Science  
BA, Trinity University, 1982  
MA, Miami University, 1984  
PhD, University of Alabama, 2010

### **Dean, Justin**

Adjunct Faculty, Sports Medicine  
BEEd, Eastern Oregon University, 2011  
DC, University of Western States, 2014

### **Donahue, Ben**

Adjunct Faculty, Exercise and Sports Science  
BS, Liberty University, 1997  
MS, United States Sports Academy, 2000  
BS, Montana State University, 2007  
MEd, Montana State University, 2010

### **Dugas, Philip**

Adjunct Faculty, Exercise and Sports Science  
BS, North Greenville University, 2005  
MS, Florida State University, 2006  
EdD, United States Sports Academy, 2014

### **Forcum, Ted**

Adjunct Faculty, Sports Medicine  
DC, Western States Chiropractic College, 1988  
CSCS, National Strength and Conditioning Association, 1988  
Diplomate, American Chiropractic Board of Sports Physicians, 1998

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EdD, United States Sports Academy, 2012  
MS, University of Wisconsin LaCrosse, 1989  
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NACWAA HERS, Athletic Administration, 2004, 2007  
ARC Instructor, American Red Cross, 1996

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BS, Dominican University, 2003  
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BA, Florida State University, 1972  
DC, Logan College of Chiropractic, 1993  
DACBSP, New York College of Chiropractic, 1993  
RCCSS (Hon), Royal Canadian Chiropractic Sports Sciences, 2009

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ATC, Board of Certification, 2005  
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CSCS, National Strength and Conditioning Association, 2005

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 BS, LeMoyne College, 1996  
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 BA, Stonehill College, 1970  
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 CAGS Human Development, UMASS-Amherst  
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 PhD, University of Missouri, 2007  
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 Applied Sport Psychology, 2012  
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 2013

## MS Human Nutrition and Functional Medicine

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 1970  
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1980

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