College of Health Sciences

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The College of Health Sciences is the place for students interested in improving and maintaining the physical, mental, and social health of others. We offer challenging degree programs in the "helping professions" and serve as the gateway to schools of medicine, dentistry, physical and occupational therapy, physician's assistant study, and optometry.

Health sciences students receive not only a superior education from knowledgeable and caring faculty but also precise and personal guidance from conscientious advising personnel. Students benefit, too, from practicums and internships that help them refine and test the skills acquired in lectures and labs as well as opportunities to participate in dynamic, interdisciplinary research projects.

The college is also the home of the Wyoming Institute for Disabilities (WIND); the Wyoming Center on Aging (WYCOA); two Family Medicine Residency Centers; the Wyoming, Washington, Alaska, Montana, and Idaho (WWAMI) medical education contract program, and WYDENT, the dental contract program with the University of Nebraska and Creighton University.

We serve as the state certifying office for the Western Interstate Commission on Higher Education (WICHE) program (refer to the section on WICHE in the first part of this catalog for program description or go to www.uwyo.edu/hs/wiche-wwami-wydent-program/index.html).

Any student seeking admission to programs in the College of Health Sciences will be required to obtain a background check as specified by college policy. Please contact your school or division for specific information.

The College of Health Sciences retains the right to deny or revoke admission to any of its programs for academic, disciplinary, ethical, or professionals standards reasons.

ASPIRE! is a program to encourage, promote, and nurture scholarship, leadership, and professionalism in our future health care professionals. ASPIRE! offers one-on-one mentoring and other advantages for a limited number of our students. Check with your program for details.

Programs of Study

Undergraduate Degrees

Bachelor of Science

- Kinesiology and health promotion
- Medical laboratory science
- Physical education teaching
- Speech, language and hearing sciences

Bachelor of Science in Dental Hygiene
Bachelor of Science in Nursing
Bachelor of Social Work

Graduate Degrees

Master of Science

- Health Services Administration
- Nursing
- Kinesiology and health
- Speech-language pathology

Master of Social Work

Professional Degrees

Doctor of Nursing Practice
Doctor of Pharmacy

Minors in Health Sciences

Minors in the College of Health Sciences are designed to complement a student's major and augment educational and employment opportunities. They increase the student's knowledge of health and human services, and provide him/her with a greater understanding of what it means to work in any aspect of health care.

Minors in Health Sciences include:

Health Sciences

This minor is designed for the student who wants to have a career in a health field but not necessarily as a provider. Instead s/he may be interested in being an administrator of a hospital or nursing home, a career in public health, or even as a health care practitioner who wants a more complete view of health care.

The minor consists of 18 hours of coursework in a variety of topics that will provide breadth in a student's background. Check out our web site: www.uwyo.edu/hs/divisions-and-programs/minor-in-health-sciences.html.

Disability Studies

Disability studies is a diverse interdisciplinary field that investigates broad questions about the nature, meanings, and consequences of disability from interrelated social, historical, cultural, and political perspectives. Students will gain a broad understanding of disability issues for working with people with disabilities rather than specific disciplinary skills and techniques. The minor consists of 18 credit hours. See www.uwyo.edu/hs/divisions-and-programs/minor-in-disability-studies.html.

Aging Studies

The field of geriatric health offers opportunities in traditional health care settings and in new settings as we redefine "geriatric care." The 18 hour interdisciplinary minor consists of core requirements that give a strong background; the electives offer a flexibility that will complement any major. For more information, see http://www.uwyo.edu/hs/divisions-and-programs/minor-in-aging-studies.html.

Undergraduate and Preprofessional Health Advising Office

Health Sciences Center, 110 & 112

The Undergraduate and Preprofessional Health Advising Office (UPHAO) in the College of Health Sciences (www.uwyo.edu/preprof/) provides preprofessional health advising to all UW students regardless of their academic majors, who are interested in pursuing future study in medicine, dentistry, optometry, occupational therapy, physical therapy, physician's assistant, or other health care careers such as chiropractic. A bachelor's degree is usually required for admission to a professional school. The University of Wyoming does not offer degrees in preprofessional areas. Students may pursue any UW degree program in which they have an interest and at the same time complete the admission requirements for the professional schools they wish to attend. The UPHAO advises students for their professional program prerequisites as well as other aspects of becoming solid candidates. Each student will also have an adviser in his/her major for advising in the major.

Current information about admission requirements, entrance examinations, application process, professional school curriculums, interviewing skills, and test preparation is available. Current admissions data and addresses for specific schools are available. Specific schools may have additional requirements; students are urged to check with the schools they wish to attend.

Information and residency applications for the WICHE programs, the WWAMI medical education program, and WYDENT, the dental education program, may be found online at www.uwyo.edu/hs/wiche-wwami-wydent-program/.

Health Sciences (HLSC)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1010. Exploring the Health Sciences. 2. [I,L◀▶(none)] Introduce philosophy of higher education, academic expectations of Health Sciences, and value system of health-related disciplines, especially issues related to cultural awareness and interprofessional collaboration. Students are expected to develop critical thinking, communication, and information literacy skills and to use skills to better understand issues related to healthcare disciplines.

1020. Intellectual Community: Women in Sports. 3. [I,L◀▶(none)] Provides an overview of the role of American women in sports. Studies concepts about women, sports, and society in contemporary and historical perspectives. Topics include: history of women in sports, physiological, social and cultural considerations, media image, and careers. Cross listed with WMST 1020.

1090. SPARX: Topics in Interdisciplinary Health Care. 1 (Max. 3). Each semester a different topic or disease state is highlighted. Using film, lectures, and selected readings, students are introduced to interdisciplinary collaboration between health care and mental health professionals. Benefits to patient care and barriers in making interdisciplinary connections are addressed.

1101. First-Year Seminar. 3. [(none)◀▶FYS]

3250. Health and Illness in American Religious Life. 3. A cross-cultural study of the connections between religion and health. Students learn to appreciate and analyze the role different religions play in understanding health and illness, as well as the role religions can play in the context of modern medicine. *Prerequisite:* junior standing or permission of instructor.

4020. SPARX: Advanced Topics in Interdisciplinary Health Care. 1 (Max 3). Interdisciplinary collaboration for improved health outcomes is the focus of this class. Students develop a deeper understanding of the benefits and difficulties that exist for interdisciplinary teams. *Prerequisites:* At least two upper-division courses in CHS, may be taken concurrently.

4030. Experiences in Community Health Service. 0. Students will be advised and guided by faculty in the College of Health Sciences in providing health related community services. Activities will vary and include but are not limited to participation in health screenings, providing programs at senior housing, working with the Wyoming Center on Aging, participating in CHAP activities, etc. *Prerequisite:* Upper division status (junior or senior) or current enrollment in a professional program in the College of Health Sciences and permission of instructor.

4040. Service Learning in Healthcare Training. 1. Provides an opportunity for students to discuss, reflect upon and learn from their community-based experiences. Students also consider the broader implications of becoming a reflective practitioner, working within a healthcare team and the benefits of interprofessional collaboration. *Prerequisites:* involvement in CHAP; upper division standing.

4100. Global Public Health. 3. [G◀▶(none)] Introduces students to the global context of public health, to principles underlying global health, and to dimensions of public health particular to international settings. It examines major themes and policies in global health and analyzes health problems and varying responses to them in different parts of the world. Dual listed with HLSC 5100; cross listed with INST 4100. *Prerequisite:* upper division student status.

4700. Health Information Technology. 3. Provides skills to conceptualize, design, and use computer and telecommunications systems to promote best practices and provide quality health care. Design a technology-based approach to one or more health care problems, building on complimentary knowledge of interdisciplinary team members. *Prerequisite:* senior or graduate status in Health Sciences, Business, or Engineering and Applied Sciences.

4970. Interdisciplinary Seminar in Health Sciences. 3. An interdisciplinary seminar designed to explore research, skills, roles and preparation of all health care professionals to gain a better understanding of the unique contribution each makes to interdisciplinary practice. *Prerequisites:* completion of 24 hours in College of Health Sciences; senior standing. (Normally offered spring semester)

4985. Health Sciences Internship. 1-6 (Max. 6). Gives students an opportunity to gain practical experience in a health care field of their choice. The intense relationship with a mentor allows the student to become socialized into a health care field, gain practice skills, and relate to other health care professionals in an interdisciplinary way. For S/U Only. *Prerequisite:* completion of all other degree requirements. (Offered fall, spring and summer)

4990. Current Topics in the Health Sciences. 1-6 (Max. 12). Provides upper division/graduate students with the opportunity for critical analysis and in-depth examination of various current topics in health science fields. *Prerequisites:* twelve hours in College of Health Sciences coursework, or in field related to the topic, or admission to a professional program within the College of Health Sciences. Individual topics courses may require specific course(s) as prerequisite. Contact the instructor for specific information. Dual listed with HLSC 5990.

5100. Global Public Health. 4. Introduces students to the global context of public health, to principles underlying global health, and to dimensions of public health particular to international settings. Examines major themes and policies in global health and analyzes health problems and varying responses to them in different parts of the world. Dual listed with HLSC 4100; cross listed with INST 5100. *Prerequisite:* upper division or graduate standing.

5990. Topics In Health Sciences. 1-6 (Max. 12). Provides upper division/graduate student with the opportunity for critical analysis and in-depth examination of various current topics in health sciences fields. *Prerequisite:* graduate standing.

Dental Hygiene

The University of Wyoming and Sheridan College offer a cooperative program of dental hygiene education which, when completed, results in two degrees. An Associate of Applied Science degree in dental hygiene is awarded by Sheridan College following completion of the prerequisites and dental hygiene prescribed study. An optional Bachelor of Science in Dental Hygiene degree is awarded by the University of Wyoming following completion of the Associate of Applied Science in dental hygiene, the University Studies Program, and other requirements of the University of Wyoming, for a total of 120 credit hours including 42 upper level hours, 30 of which must be from the University of Wyoming. See www.uwyo.edu/hs/divisions-and-programs/dental-hygiene-programs.html.

The American Dental Association has awarded full accreditation to the Associate of Applied Science degree in dental hygiene at Sheridan College. Graduates are eligible to take

the National Board of Dental Hygiene exam, as well as regional and state exams for licensure, as registered dental hygienists.

Applicants should visit www.sheridan.edu/site/sc/academics/programs-and-majors/dental-hygiene for specific prerequisites and application materials. Applications are due to Sheridan College prior to February 15 of the year they wish to enter the program. Class sizes are limited. Admission is contingent upon successful completion of a background check.

Learning Outcomes

The primary objective of the program is to assure that graduates have knowledge and abilities necessary to successfully practice dental hygiene.

All prerequisite coursework must be completed with a cumulative grade point of 2.750 (on a 4.000 point scale). Science courses must be current within five years at the time of application to Dental Hygiene professional program. Completion of the prerequisite courses does not guarantee admission to the professional program. Students must also complete a minimum of 20 hours of dental hygiene observation prior to application.

Bachelor's Degree in Dental Hygiene Requirements

See http://www.uwyo.edu/hs/divisions-and-programs/dental-hygiene-program.html for a four year plan and a list of program prerequisites.

1. Program prerequisites,
2. A.A.S. in Dental Hygiene from Sheridan College,
3. Completion of all University of Wyoming requirements,
4. STAT 2050 or STAT 2070, and
5. At least 120 credit hours.

Students interested in the bachelor's degree in dental hygiene should contact the Undergraduate and Preprofessional Health Advising Office in the Health Sciences Center, rooms 110 and 112, or phone (307)766-6704 or (307)766-3499. E-mail: denthygiene@uwyo.edu or visit http://www.uwyo.edu/hs/divisions-and-programs/dental-hygiene-program.html.

Dental Hygiene (DHYG)

3230. Clinical Seminar II. 2. An adjunct to the clinical dental hygiene course devoted to the development and nurturing of skills needed for treatment of more advanced periodontal cases, including initiation of a periodontal case study. Also included will be an introduction and preparation for the use of state-of-the-art clinical technologies. *Prerequisite:* DHYG 2420. (Normally offered fall semester)

3250. Clinical Seminar III. 2. Prepares dental hygiene students to make transitions from an educational setting to private practice. Covers range of subjects enabling students to meet challenges associated with variety of patient care issues, including meeting needs of the elderly. Discusses various dental specialty practices. *Prerequisites:* DHYG 3230, 3300 and 3350 or concurrent enrollment. (Normally offered spring semester)

3300. Clinical Dental Hygiene II. 5. Students gain further practical experience in dental hygiene procedures by providing comprehensive patient care in the Sheridan College and Veterans' Administration Medical Center clinics. A flexible, self-paced format allows students to meet requirements in procedures for patient record-keeping, patient education, dental prophylaxis, dental radiography and other routine clinical procedures. *Prerequisite:* DHYG 2350. (Normally offered fall semester)

3350. Clinical Dental Hygiene III. 5. Allows students to garner practical experience in clinical procedures requiring greater skill and more knowledge than procedures previously undertaken. Students successfully completing this course are fully prepared for transition to office practice. *Prerequisite:* DHYG 3300. (Normally offered spring semester)

3400. General and Oral Pathology. 3. Designed to teach students concepts underlying general and oral manifestations of human disease states, manifestations of specific diseases, relationships to body defense mechanisms, and potential implications of medical and dental hygiene treatment. To the extent possible, applications to clinical situations in dental hygiene practice are made. *Prerequisites:* one year predental hygiene (including general pathology); MOLB 2021 or equivalent. (Normally offered fall semester)

3550. Community Dental Health. 3. Introduces basic skills needed to assess, plan and implement strategies to evaluate the dental health of the community, including research methodology and basic statistical analysis. Provides students with basic understanding of significant social, political, psychological and economical factors influencing the American Health Care System. *Prerequisite:* DHYG 2100. (Normally offered spring semester)

3600. Ethics and Law in Dental Hygiene. 2. Core principles in ethics and values as they relate to the professional code of conduct and state jurisprudence. Students explore contemporary issues within a diverse society in understanding and applying a personal value system to issues in the dental hygiene profession. *Prerequisite:* successfully complete all first-year dental hygiene courses.

3720. Office Practice. 2. Provides students with current information and experience in office practice and management. Discusses professionalism; office leadership roles; legal responsibilities; team responsibilities in dental offices; and selecting, securing and maintaining satisfying employment. *Prerequisites:* DHYG 2300, 2350, 3300 and a communications course. (Normally offered spring semester)

3750. Periodontology. 3. Briefly reviews anatomy and histology of periodontal structures and dental accretions. Studies classifications and etiology of periodontal diseases, including local and systemic factors. Thoroughly explores the hygienist's role in disease recognition, prevention, therapeutic procedures and maintenance. (Normally offered fall semester)

3770. Pain Management. 2. Provides a comprehensive background for performing field infiltration, nerve block anesthesia and nitrous oxide/oxygen inhalation sedation. *Prerequisite:* successful enrollment in dental hygiene major or consent of instructor. (Normally offered fall semester)

3775. Pain Management Lab. 1. Taken concurrently with DHYG 3770 Pain Management. Provides opportunities to apply principles learned. Clinical laboratory experiences includes practice, demonstrations and evaluation of pain management techniques. *Prerequisites:* successful completion of sophomore year course work in dental hygiene, current certifications in CPR, and curriculum enrollment in dental hygiene major or consent of instructor. (Normally offered fall semester)

3800. Board Review. 1. Designed to assist dental hygiene students in preparing for the National Board Dental Hygiene Exam, the western and central regional clinical and anesthesia board exams, and state jurisprudence exams. These exams are required for licensure to practice dental hygiene in the United States. *Prerequisite:* DHYG 3300.

4850. Education Practicum in Dental Hygiene. 6. Allows students to experience both clinical and didactic elements of dental hygiene teaching. *Prerequisites:* completion of dental hygiene didactics, all requirements of program. Final course of program. (Offered both semesters)

Division of Communication Disorders

265 Health Sciences, (307) 766-6427
FAX: (307) 766-6829
Web site: www.uwyo.edu/comdis
Director: Mark Guiberson

Professors:
MARY HARDIN-JONES, B.A. Texas Tech University 1978; M.S. 1979; Ph.D. University of Iowa 1984; Professor of Speech-Language Pathology 2005, 2001.
DAVID L. JONES, B.S. Westminster College 1980; M.A. University of Iowa 1983; Ph.D. 1987; Professor of Speech-Language Pathology 2005, 2001.
TERESA A. UKRAINETZ, B.A. University of Calgary 1984; M.S. University of British Columbia 1987; Ph.D. University of Texas at Austin 1995; Director, Division of Communication Disorders 2008; Professor of Speech-Language Pathology 2007, 1995.

Associate Professors:
MARK GUIBERSON, B.A. University of Colorado 1997; M.A. 1999; Ph.D. Colorado State University 2006; Associate Professor of Speech-Language Pathology 2014, 2011.
DOUGLAS B. PETERSEN, B.A. Utah State University 1999; M.Ed. 2002; Ph.D. 2010; Associate Professor of Speech-Language Pathology 2015, 2010.
ROGER W. STEEVE, B.A. San Diego State University 1990; M.A. 1993; Ph.D University of Washington 2004; Associate Professor of Speech-Language Pathology 2011, 2005.

Assistant Professors:
ERIN J. BUSH, B.S. University of Wyoming 2000; M.S. University of Nebraska-Kearney 2003; Ph.D. University of Nebraska-Lincoln 2011; Assistant Professor of Speech-Language Pathology 2015.
MARY JO C. HIDECKER, B.A. University of Iowa 1981; M.A. 1984; P.h.D. Michigan State University 2004; M.S. 2011; Assistant Professor of Audiology and Speech-Language Pathology 2013.

Academic Professionals:
LYNDA D. COYLE, B.A. Holy Names College 1981; M.S. University of Wisconsin-Eau Claire 1982; Senior Lecturer 2007, 1999.
TERESA J. GARCIA, B.S. University of Wyoming 1989; M.S. 1991; Associate Lecturer 2004, 1995.
CATHERINE L. ROSS, B.S. Missouri State University 1973; M.S. University of Wyoming 1999; Associate Lecturer 2014, 2008.

Adjunct Instructor:
Kathleen Fahey, Ph.D., CCC-SLP

Adjunct Clinical Instructors:
Anna Anderson, M.S., CCC-SLP
Cynthia Anderson, M.S., CCC-SLP
Kathrine Bergmann, M.S., CCC-SLP
Kathe Dahill, M.S., CCC-SLP
Melissa Denker, M.S., CCC-SLP
Patti Drui, M.S., CCC-SLP
Susie Fornstrom, M.S., CCC-SLP
Heide Harm, M.S., CCC-SLP
Lealani Kersenbrock, M.S., CCC-SLP
Sara Litton, M.S., CCC-SLP
Kimberly Magbual, M.S., CCC-SLP
Carol Morse, M.S., CCC-SLP
Stephanie Sailors, M.S., CCC-SLP
Amy Salsgiver, M.S., CCC-SLP
Sue Torney, M.A., CCC-SLP
Kyle Trujillo, M.S., CCC-SLP
Carolyn Wood-Helling, M.S., CCC-SLP

Professors Emeriti:
Janis A. Jelinek
Douglas W. Laws
Michael A. Primus

The areas of speech-language pathology and audiology are concerned with disorders of communication. Included in these areas are the studies of systems underlying the normal communicative process (phonetics, acoustics, neurology, anatomy and physiology); development of speech, hearing and language functions; deviations from the normal communicative process; and diagnosis and management of speech, language and hearing disorders.

The Division of Communication Disorders offers a bachelor's (B.S.) degree in speech, language and hearing science. The bachelor's degree is considered preprofessional preparation for entrance into a graduate program in either speech-language pathology or audiology. A graduate degree is needed to work in most employment settings. The division offers a Master of Science degree in speech-language pathology. The combined undergraduate and graduate programs are designed to prepare students to meet the academic and clinical requirements for Wyoming licensure and the Certificate of Clinical Competence awarded by the American Speech Language Hearing Association.

The graduate program in speech-language pathology is accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). See the division web site for additional information.

Any student seeking admission to the graduate program in Speech-Language Pathology within the Division of Communication Disorders will be required to obtain a background check as specified by college policy.

Undergraduate Learning Outcomes

The B.S. in Speech, Language, and Hearing Science provides a quality pre-professional education in human communication sciences and disorders. Students graduate with the knowledge and skills needed to go on to further education in professional programs in speech-language pathology, audiology, and to other careers in health and education. Program quality is monitored and maintained through regular examination of the results of direct and indirect measures of teaching and learning goals.

Students earning a B.S. in Speech, Language, and Hearing Science will demonstrate competencies in the following areas within (a) human communication and swallowing, (b) clinical knowledge and skills, and (c) communication and professionalism.

A. Core Competencies in Human Communication and Swallowing Science
   1. Anatomical and physiological bases of communication and swallowing
   2. Neurological bases of communication and swallowing
   3. Acoustic and articulatory bases of communication
   4. Psychological and linguistic bases of communication
   5. Social and cultural bases of communication
   6. Research methods used in the field of communication disorders

B. Introductory Clinical Knowledge and Skills
   7. Nature of hearing and balance disorders
   8. Remediation of hearing and balance disorders
   9. Nature of speech and swallowing disorders
   10. Nature of language and literacy disorders
   11. Principles and methods of assessment and treatment
   12. Phonetic transcription and language sample analysis of typical speakers

C. Basic Competencies in Communication and Professional Areas
   13. Scholarly and professional written expression

14. Scholarly and professional oral expression
15. American Sign Language or other second language
16. Locating and evaluating resources for evidence-based practice
17. Problem-solving and critical thinking
18. Self-regulation and meta-cognition
19. Interpersonal interactions and teamwork
20. Behavior conforming to academic and professional ethical standards

Suggested Course Sequence

FRESHMAN YEAR: Fall		**Hrs.**
USP FYS Course		3
ENGL	1010	3
SPPA	1010	3
PSYC	1000	3
LIFE	1010	4
	Total Hrs.	**16**

FRESHMAN YEAR: Spring		**Hrs.**
USP H Course		3
MATH	1400 (or MATH 1450)	3
PHYS	1050	4
POLS	1000	3
Elective		3
	Total Hrs.	**16**

SOPHOMORE YEAR: Fall		**Hrs.**
KIN	2040	3
KIN	2041	1
SPPA	2110	4
SPPA	2250	1
Elective		3
	Total Hrs.	**12**

SOPHOMORE YEAR: Spring		**Hrs.**
FCSC	2121	4
SPPA	2120	4
SPPA	2210	3
USP COM2 Course		3
	Total Hrs.	**14**

JUNIOR YEAR: Fall		**Hrs.**
SPPA	3265	3
STAT 2050, 2070 or 2000		3-4
Elective		3
Elective		3
Elective		3
	Total Hrs.	**16-17**

JUNIOR YEAR: Spring		**Hrs.**
SPPA	4310	3
SPPA	3160	3
Atypical (PSYC 4310, 4320, CNSL 4520)		3
Elective (3000/4000 level)		3
Elective		4
	Total Hrs.	**16**

SENIOR YEAR: Fall		**Hrs.**
SPPA	4380	3
SPPA	4340	3
SPPA	4750 (COM3)	3
Elective (3000/4000 level)		3
Elective (3000/4000 level)		3
	Total Hrs.	**15**

SENIOR YEAR: Spring		**Hrs.**
SPPA	4150	3
SPPA	4240	3
SPPA	4250	3
SPPA	4220	3
Elective (3000/4000 level)		3
	Total Hrs.	**15**

Total hours in curriculum and required for degree	**120-121**
Hours required in 3000/4000-level courses	**42**

Note: a grade of C- or better must be earned in all SPPA courses; courses in the major must be taken for a letter grade unless offered for S/U only. SPPA 2120 can be substituted for by a Modern Language.

Speech and Hearing Clinic

Speech and hearing clinical services are available to University of Wyoming students. For information concerning these services, contact the Division of Communication Disorders.

There is a student organization with whom speech-language pathology and audiology majors may choose to affiliate, the National Student Speech-Language and Hearing Association. Objectives are to promote and recognize scholastic achievement and to support clinical, research, and service endeavors.

Graduate Study

Admission to the M.S. Degree Program in Speech-Language Pathology

Admission Requirements

Admission to the master's program in speech-language pathology is made on a competitive basis. We accept students to start in the fall of each year. For application, admission, and a description of the program, see the division website.

Application Procedure

Applications to our master's program must be made through an electronic, centralized application service: the Communication Sciences and Disorders Centralized Application Service for Clinical Education in Audiology and Speech Language Pathology (CSDCAS). Instructions and application procedures are available at https://portal.csdcas.org. Check the division web site in October for current instructions and deadlines.

Applicants will be notified of the division's decision on acceptance, alternate, or denial by mid-March. Applicants must respond to the offer by April 15. Alternates will be offered positions that become available after April 15.

For International (including Canadian) students, the university must determine whether financial resources are sufficient for study here.

International Students

International students from non-English-speaking countries need a TOEFL score of 600 to show English proficiency. Additional sources of evidence may be requested by the division to make a final decision. English proficiency must be sufficient for success in graduate school and certification as a speech-language pathologist in the United States, even if the applicant intends to return to the native country.

Conditional Status

An applicant may be admitted conditionally if he or she does not meet the GPA or GRE requirements for full admission, and the Division determines that there are sufficient areas of strength for success in graduate school in comparison to other applicants. Conditions will be placed on admission such as graduate grade point average, performance criteria, or completion of certain courses.

Requirements Following Offer of Admission

Students who accept an offer of admission to the program must then apply to the university for formal admission.

Criminal Background Check

Admission to the graduate program in speech-language pathology is contingent upon passing a criminal background check. Each student recommended for admission into program will be required to obtain, pay, and pass a criminal background check. These background checks are routinely required by schools, hospitals, and other agencies that participate in the clinical education of our students. The results of the background check may determine admission to our program. Please see the College of Health Sciences web site for the policy and procedures document.

Program Specific Graduate Assistantships

Financial help for graduate students is available each year through the department with assistantships and other funding. Typically, graduate assistantships include one-half tuition support and a monthly stipend. These assistantships require the student to spend 10 hours per week assisting faculty members in teaching and research.

Awards are competitive and based on past academic performance, evidence of professional promise, and letters of recommendation.

Graduate assistantships are awarded to applicants with full admission.

Program Specific Degree Requirements Master's Programs

The graduate program consists of a minimum of 55 SCH of academic coursework, on-campus clinical practica, and external clinical practica. Students may pursue either a thesis or non-thesis track during their graduate studies. Both tracks lead to eligibility for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP), granted by the Clinical Certification Board of the American Speech-Language-Hearing Association. Graduates are also eligible for the Wyoming license in speech-language pathology. A supervised Clinical Fellowship Year (CFY) is required beyond the graduate degree for certification. The master of science program in speech-language pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

Typical Programs of Study

Plan A (thesis) (64 hour program)
Speech-Language Pathology
37 hours of graduate academic coursework
23 hours of graduate clinical practicum (clinical track)
4 hours of 5960 thesis research

Plan B (Non-thesis) (61 hour program)
Speech-Language Pathology
37 hours of graduate academic coursework
23 hours of graduate clinical practicum (clinical track)
1 hour 5961 comprehensive examination

Upon completion of the M.S. in Speech-Language Pathology, students will meet knowledge and skill competencies within the following standards

A. In academic coursework, students will demonstrate knowledge of:
1. Basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, development, linguistic and cultural bases
2. Etiologies and characteristics of communication and swallowing disorders in the areas of articulation, stuttering, voice and resonance, language, hearing, swallowing, cognition, social aspects, and communication modalities
3. Principles and methods of prevention, assessment and intervention for people with communication and swallowing disorders

B. In clinical education, students will demonstrate knowledge and skills in:
1. Planning and execution of evaluation and treatment at an appropriate level of independence
2. Professional comportment and culturally-sensitive clinical practices
3. Competent clinical writing

C. At the conclusion of the graduate program, students will demonstrate preparation for entry into clinical practice by:
1. Successful completion of external clinical practica
2. Passing the oral comprehensive examination
3. Passing a national clinical certification examination

To see specific competencies, refer to the Graduate Handbook on the division website.

Leveling Coursework

Leveling is completed on a course-by-course basis, not as part of a degree program. Students sign up for leveling courses as non-degree undergraduate (NDU) each semester that they take only undergraduate courses. Any semester in which a student takes a graduate class (numbered 5000 or above), the student must change status to non-degree graduate (NDG). This allows the graduate courses to be applied to the master's program at a later date. Fees and tuition for all the coursework in that semester are charged at the graduate student rate. Refer to the division website for a list of courses.

Continuing Education

Students may take graduate coursework as continuing education without having been admitted to the graduate program, if instructor consent is granted. If students are accepted at a later date into the graduate program, they may apply a maximum of 12 graduate credit hours earned as a non-degree student toward their graduate degrees. Coursework submitted must be approved by the division at the time the official program of study is submitted. Coursework may not be older than 6 years from time of master's graduation.

Course Transfers and Waivers

In accredited programs of speech-language pathology, evaluation involves both course grades and demonstration of specific knowledge and skills. As a result, for any course transferred, waived, or applied from non-degree status, evidence of the knowledge and skills linked to that course will still be required.

Speech-Language Pathology (SPPA)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1010. Introduction to Communication Disorders. 3. [I,L◀▶(none)] Introduces information regarding basics of speech and hearing. Discusses disorders of speech and hearing by defining the problem, etiology or theories of cause, classifications and controversies, evaluation techniques and therapies to correct the disorder.

1101. First-Year Seminar. 3. [(none)◀▶FYS]

2110 [4100]. American Sign Language I. 4. Basic comprehension and expression of American Sign Language (ASL), the language used by the Deaf community in the United States. ASL vocabulary, grammar, and pragmatics are taught through lecture, conversation, and storytelling. The direct experience method (using ASL with no voice) is utilized to enhance the learning process. (Offered fall, spring and summer)

2120 [4120]. American Sign Language II. 4. Second level of ASL comprehension and expression. ASL vocabulary, grammar, and pragmatics, along with increased fluency, are taught through lecture, conversation, and storytelling. Translation from English to ASL is addressed. *Prerequisite:* SPPA 2110.

2210 [3210]. Phonetics and Phonological Development. 3. Articulatory description of speech sound production and normal pho-

nological development. Introduction to the International Phonetic Alphabet and speech transcription skills. *Prerequisite:* SPPA 1010.

2250. Clinical Observation. 1. Students obtain a minimum of 10 approved observation hours of live and recorded speech-language pathology and audiology services. Weekly class meetings will discuss the communication disorders and assessment/treatment activities observed. ASHA Code of Ethics, HIPAA procedures, and observer requirements (e.g., background checks, TB screen) will be conducted. *Prerequisite:* SPPA 1010.

3160 [4160]. Language Development. 3. Deals with the development of semantics, syntax, morphology, discourse, and pragmatics for typically-developing children from infancy to adolescence. Includes prelinguistic and paralinguistic communication, the cognitive correlates of communication, and written language. Considers the effects of sociocultural context and multiple language acquisition. *Prerequisite:* SPPA 1010.

3265 [3400]. Anatomy and Physiology of Speech, Swallowing and Hearing. 3. Introduces the student to the anatomy of the normal speech and hearing systems as well as the physiologic underpinnings of the speech (respiration, phonation, articulation), swallowing, and hearing (external, middle, and inner ear) systems. Theories of speech production and speech perception are presented. *Prerequisites:* KIN 2040.

4000. Workshop in Speech Pathology/Audiology. 1-8 (Max. 8). Varies with interests of student requests. Incorporates material relative to any area of speech and hearing. *Prerequisite:* consent of instructor. (Offered based on sufficient demand and resources)

4070. Deaf Studies. 3. [CS,D◀▶H] Studies deaf culture and deaf history in the United States. Culture topics will include deaf community dynamics, humor, behavior, emotional and social interaction, besides issues involving deaf children as a linguistic minority. History will be discussed from the 1700s to the present in the U.S. *Prerequisites:* SPPA 2110.

4130. Advanced ASL. 4. Third level of ASL comprehension and expression. Addresses increased fluency in ASL; register variation for different conversational participants; and specialized vocabulary, including sexuality and religion. Translation from English to ASL is addressed. *Prerequisites:* SPPA 2120.

4140. American Sign Language Assistant. 1-4 (Max 12). To improve and retain signing skills through assisting instructor in Beginning/Intermediate Sign Language courses, facilitating students in Sign Language Labs, providing individual student assistance, and participating in outside activities. One semester credit hour requires 4 hours of work per week. Satisfactory/Unsatisfactory only. *Prerequisites:* consent of instructor and SPPA 2120. (Offered fall, spring and summer)

4150. Aural Rehabilitation. 3. Examines basis for and characteristics of communication problems created by hearing loss and management procedures to facilitate communication and adjustment to hearing loss. Includes acoustic and visual properties of speech, amplification devices and hearing loss in school children. Dual listed with SPPA 5150. *Prerequisite:* SPPA 4340.

4220. Speech Disorders Across the Lifespan. 3. The nature and causes of developmental and acquired speech disorders across the lifespan are examined. Topics include developmental speech sound disorders, apraxia, stuttering, dysarthria, voice disorders and other disordered speech populations. Principles of assessment and remediation are introduced. *Prerequisites*: SPPA 3265 and 3160. (Note: 3160 was previously listed as 4160; 4160 is no longer offered but meets requirement).

4240. Language Disorders Across the Lifespan. 3. The nature and causes of developmental and acquired language disorders across the lifespan are examined. Topics include the behavioral and linguistic characteristics of specific language impairment, intellectual disability, autism, traumatic brain injury, right hemisphere trauma, aphasia, and dementia. Principles of assessment and remediation are introduced. *Prerequisites:* SPPA 3265, SPPA 3160.

4250. Clinical Methods. 3. Introduction to procedures of intervention and evaluation: writing observation reports, goals and objectives, treatment notes, data collection and analysis, ASHA Code of Ethics, treatment planning, interviewing, and counseling. Clinical observation of speech-language pathology and audiology services will occur. Observer requirements (e.g., background checks, TB screen) must be met. *Prerequisites:* senior standing or consent of instructor. (Normally offered fall semester)

4310. Acoustics of Speech and Hearing. 3. Study of 1) the nature of sound and 2) normal speech and hearing processes. Topics include characteristics of simple and complex sound, sound travel in the environment, psychoacoustics, speech perception, speech production, and analysis of sound in humans. *Prerequisite:* SPPA 3265.

4340. Basic Audiology. 3. An introduction to audiology as a profession, with primary focus on screening and diagnostic methods for the clinical evaluation of hearing loss in children and adults. *Prerequisites:* SPPA 3265. (Normally offered spring semester)

4380. Neurological Basis of Communication. 3. Studies details of human nervous system, including central and peripheral nervous systems, major motor and sensory pathways and special senses. Emphasizes neurology of various communication disorders. *Prerequisites:* SPPA 3265.

4750. Research Methods in Communication Disorders. 3. [WC◀▶COM3] Deals with scientific investigation of normal, disordered, and intervention aspects of speech, language, and hearing. Topics include evaluating and synthesizing published research, research writing, research design, and data analysis techniques. The aims are to develop writing competence within the discipline, to create research-aware clinicians, and to introduce students to research careers. *Prerequisite:* STAT 2070.

4890. Independent Study. 1-3 (Max. 4). An independent study will be developed by the instructor and undergraduate student. It will consist of activities such as: conducting a small research project, assisting in a research project, composing a systematic research review, participating in a clinical experience, or helping to develop a professional development or public awareness program. *Prerequisite:* prior or concurrent enrollment in SPPA 3210.

5000. Seminar in Communication Disorders. 1-8 (Max. 8). The participation in and discussion of special problems and/or research related to speech-language, pathology and audiology. *Prerequisite:* B.S. degree and consent of instructor.

5020. Phonological Assessment and Intervention. 3. Emphasis on normal phonetic and phonologic development, diagnosis and clinical management of articulatory and phonological disorders. *Prerequisite:* SPPA 3210.

5030. Clinical Practicum. 1-4 (Max. 12). Supervised clinical experience with speech, language, and hearing disordered children and adults under supervision of University of Wyoming Speech and Hearing Clinic faculty. *Prerequisite:* matriculating graduate students only.

5100. Motor Speech Disorders. 3. Evaluation and treatment of motor speech disorders. Topics will include characteristics of disordered speech associated with neurological impairments/diseases; methods for evaluating communication disorders associated with dysarthria, apraxia of speech, and other neurological and acquired conditions, and treatment approaches. *Prerequisite:* SPPA 4380 or a course covering neuroanatomy/physiology of normal and disordered communication.

5110. Craniofacial Disorders. 3. Studies communication disorders related to cleft lip and palate disorders and associated craniofacial sequences and syndromes. Assessment and treatment of these communication disorders is presented in the context of interdisciplinary management. Surgical and nonsurgical treatment procedures employed to manage speech problems associated with velopharyngeal insufficiency are included. *Prerequisite:* SPPA 3265, SPPA 2210.

5115. Interdisciplinary Early Childhood Seminar. 3. Advanced professional course for students interested in current trends and issues in early childhood development. Interdisciplinary in nature, drawing from research in communication disorders, kinesiology and health, elementary and early childhood education and special education, child and family studies, nursing, and psychology. Cross listed with EDEC, PSYC, and HLED 5115. *Prerequisite:* graduate status.

5120. Stuttering. 2. Theories of etiology, symptoms of the problem, diagnosis and treatment of childhood non-fluency and various approaches to therapy for the adult stutterer. *Prerequisite:* graduate level standing.

5130. Adult Neurogenic Disorders. 4. This course will cover acquired neurogenic communication disorders. Topics include language disorders (focusing on Aphasia) as well as cognitive-communication disorders (i.e., traumatic brain injury, Right Hemisphere Dysfunction, and Neurocognitive disorder). This graduate course provides 1) a basic understanding of the neuroanatomical/physiological basis and 2) instruction regarding evaluation and treatment methods. *Prerequisites:* SPPA 4380.

5140. Evaluation Procedures in Communication Disorders. 3. Focuses on the processes and procedures related to the evaluation of communication disorders. Topics include interviewing, norm-referenced assessment, criterion-based measurement, dynamic assessment, progress monitoring, and psychometric analysis. Overviews models of disability, such as medical, functional, and sociopolitical models, and how they influence the evaluation process. *Prerequisite:* acceptance to the University of Wyoming SLP Master's Program.

5150. Aural Rehabilitation. 3. Examines basis for and characteristics of communication problems created by hearing loss and management procedures to facilitate communication and adjustment to hearing loss. Includes acoustic and visual proper- ties of speech, amplification devices and hearing loss in school children. Dual listed with SPPA 4150. *Prerequisite:* SPPA 4340.

5200. Internship. 1-12 (Max. 12). An advanced practicum in speech pathology; the student is given increased responsibility in clinic management and practicum. Offered summers only. *Prerequisite:* SPPA 5030.

5210. Developmental Disabilities. 3. AAC and other interventions, communication, and cognitive profiles associated with developmental disabilities, such as intellectual disability, autism spectrum disorder, and sensorimotor impairments. Intervention approaches to support communicative development in these populations. Selection, design, and application of augmentative/alternative communication systems to enhance communication, education, and quality of life for individuals with developmental and acquired disorders. *Prerequisite:* SPPA 3160.

5220. Voice Disorders. 3. Study of the etiology, assessment, and remediation of voice disorders. Includes a discussion of preventing disorders, maintaining a healthy voice, and normal changes in voice. Presentation of rehabilitation options for laryngectomized speaker. *Prerequisite:* SPPA 3265.

5230. Dysphagia. 3. Provides information regarding the anatomy and physiology of the adult and pediatric swallowing mechanisms, the diagnosis of dysphagia and feeding disorders using clinical and instrumental approaches, the medical diagnoses for which dysphagia is a common symptom, and methods that are commonly used to treat dysphagia and feeding disorders. *Prerequisite:* SPPA 3265.

5270. Educational Practicum. 1-12 (Max. 12). Under supervision, the student is given increased responsibility for performing speech and language assessments, hearing screenings, and treatment of children in an educational setting. Students will relate to other educational personnel and counsel teachers and families about communication disorders. *Prerequisites:* completion of at least two semesters (including summer) of approved graduate coursework and clinical practicum (SPPA 5030); and approval of faculty.

5280. Preschool Language Intervention. 3. Principles and techniques of language assessment and intervention for preschoolers, infants, and low- functioning individuals. *Prerequisite:* SPPA 3160.

5290. Medical Practicum. 1-12 (Max. 12). Under supervision, the student is given increased responsibility for performing speech and language assessments, hearing screenings and treatment of children and adults in a medical setting. Students relate to other medical and clinical personnel and counsel professionals and families about communication disorders. *Prerequisites:* Completion of at least two semesters (including summer) of approved graduate coursework and clinical practicum; and approval of faculty.

5330. School-Age Language Intervention. 3. Principles and techniques of language assessment and intervention for school-age children and adolescents with particular attention to service delivery issues in schools. *Prerequisite:* SPPA 3160.

5380. Professional Practice. 1-2 (Max. 4). Discusses issues related to the professional practice of speech-language pathology or audiology, including ethics, professional standards, public law, and universal precautions. *Prerequisite:* graduate standing in Communication Disorders and consent of instructor.

5500. Topics in Communication Disorders. 1-8 (Max. 9). Provides a critical review of recent theories and developments in area of communication disorders. This is a continuing seminar course dealing with various advanced topics in communication disorders. *Prerequisite:* graduate standing.

5750. Research Methods in Speech Pathology and Audiology. 3. Emphasizes the application of scientific methodologies to areas of Speech-Language Pathology and Audiology. Topics to be covered include: introduction to writing research papers; reviewing and critiquing the literature; experimental designs; techniques in data analyses. *Prerequisite:* STAT 2070 or equivalent; B.S. degree in speech pathology audiology; and acceptance into the graduate program.

5890. Independent Study. 1-3 (Max. 4). Graduate-level independent study will be developed by the instructor and student. It will consist of activities such as: conducting a research project of a smaller scale than a thesis, assisting in a research project, composing a systematic research review, or developing a professional education or public awareness program. Satisfactory/unsatisfactory only. *Prerequisite:* graduate standing.

5900. Practicum in College Teaching. 1-3 (Max. 3). Work in classroom with a major professor. Students are expected to give some lectures and gain classroom experience. *Prerequisite:* graduate standing.

5920. Continuing Registration: On Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5940. Continuing Registration: Off Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5959. Enrichment Studies. 1-3 (Max. 99). Designed to provide an enrichment experience in a variety of topics. Note: credit in this course may not be included in a graduate program of study for degree purposes.

5960. Thesis Research. 1-12 (Max. 24). Graduate level course designed for students who are involved in research for their thesis project. Also used for students whose coursework is complete and are writing their thesis. *Prerequisite:* enrollment in a graduate degree program.

5961. Graduate Projects. 1-4. (Max. 4). Limited to those students enrolled in a Plan B graduate program. Students should be involved in non-course scholarly activities in support of their Plan B project. *Prerequisites:* must be enrolled in Plan B program and have departmental approval.

5990. Internship. 1-12 (Max. 24). *Prerequisite:* graduate standing.

Division of Kinesiology and Health

Corbett Building, (307) 766-5284
FAX: (307) 766-4098
Web site: www.uwyo.edu/kandh
Director: Derek Smith

Professors:

TAMI BENHAM DEAL, B.S. Indiana University 1981; M.S. 1988; P.E.D. 1989; Professor of Kinesiology and Health 2012.

MARK BYRA, B.Ed. University of Victoria 1979; M.S. Dalhousie University 1983: Ph.D. University of Pittsburgh 1989; Professor of Kinesiology and Health 2001, 1990.

JAYNE M. JENKINS, B.S. Mankato State University 1971; M.S. University of Wyoming 1995; Ph.D. University of North Carolina 1999; Professor of Kinesiology and Health 2011, 1999.

Associate Professors:

DEREK SMITH, B.S. Colorado State University 1997; M.S. Wake Forest University 1999; Ph.D. University of Colorado 2003; Associate Professor of Kinesiology and Health 2009, 2003.

TRISTAN WALLHEAD, B.S. Loughborough University 1994; M.S. Leeds Metropolitan University 2000; Ph.D. Ohio State University 2004; Associate Professor of Kinesiology and Health 2010, 2004.

QIN ZHU, B.S. Shanghai University of Sports 1999; M.Ed. 2002; Ph.D. Indiana University 2008; Associate Professor of Kinesiology and Health 2014, 2008.

Assistant Professors:

BOYI DAI, B.Ed. Beijing Sport University 2007; M.S. Iowa State University 2009; Ph.D. University of North Carolina at Chapel Hill 2012; Assistant Professor of Kinesiology and Health 2012.

KAREN GAUDREAULT, B.S. Northern Illinois University 1998; M.S. University of North Carolina at Greensboro 2000; Ph.D. University of Georgia 2009; Assistant Professor of Kinesiology and Health 2011.

EMILY GUSEMAN, B.S. The Pennsylvania State University 2003; M.A. University of North Carolina at Chapel Hill 2005; Ph.D. Michigan State University 2012; Assistant Professor of Kinesiology and Health 2012.

EVAN C. JOHNSON, B.A. The George Washington University 2004; M.A. University of Connecticut 2008; Ph.D. 2014; Assistant Professor of Kinesiology and Health 2015.

CHRISTINE M. PORTER, B.S. University of Maryland 1993; M.A. University of London 2002; Ph.D. Cornell University 2010; Assistant Professor of Kinesiology and Health 2010.

R. TUCKER READDY, B.A. University of California, Berkeley 2000; M.A. San Diego State University 2004; Ph.D. Oregon State University 2009; Assistant Professor of Kinesiology and Health 2010.

Academic Professionals:

GRETCHEN SEWCZAK-CLAUDE, B.S. Regis University 2003; D.P.T. 2007; Assistant Lecturer in Kinesiology and Health 2014.

MARCI SMITH, B.S. Colorado State University 1995; M.S. Wake Forest University 1998; Associate Lecturer in Kinesiology and Health 2012, 2003.

Adjunct Faculty:

Laurence Deal, Shane Tweeter, Joi Thomas, Enette Larson Meyer, Jordan Kobritz, Ryan Pinson, Jennifer Knerr, Jill Dalgarno

Professors Emeriti:

Paul Dunham
Ward Gates
Charles W. Huff
Donna Marburger
D. Paul Thomas

The Division of Kinesiology and Health has three principle functions specific to undergraduate education: (1) to prepare students in kinesiology and health promotion for a variety of clinical and non-clinical settings; (2) to prepare students to teach physical and health education in schools K-12; and (3) to continue to deliver the 2003 USP Physical Activity and Your Health program university wide to meet the University Studies Physical Activity and Health requirement. Students enrolled in these programs must meet academic standards as determined by the Division of Kinesiology and Health, College of Health Sciences, and the University of Wyoming.

The K&HP major prepares students well for admission to physical therapy school and occupational therapy school, as well as other health professions (e.g., physician, physician assistant, dentist, chiropractor, optometrist, etc.). Approximately 60% of students majoring in K&HP apply to one of these health professional schools once they have completed their B.S. degree in Kinesiology and Health. Other students majoring in training, fitness, recreation, and leisure, and health promotion with state agencies - the job market is very diverse for these students.

The PHET program prepares students to teach physical and health education (PHET) in schools K-12. The PHET major is a nationally recognized program for meeting the NASPE/NCATE Initial Physical Education Teacher Education Accreditation Standards. This program offers individuals opportunity to combine certifications/endorsements in health education K-12, adapted physical education K-12, and coaching.

A graduate program leading to a Master of Science degree in Kinesiology and Health is offered by the Division.

Program Admission

Students who meet University of Wyoming entry requirements are admitted to the university in one of the two undergraduate majors that leads to the Bachelor of Science degree. The Division's undergraduate majors are open at the freshman level to all graduates of accredited high schools. Advanced placement for students with previous college credit is based on evaluation of transcripts of previous academic work. When students are ready to begin their junior year in the two undergraduate programs offered, they must make application for admission. The entry course for admission to the junior year of the Kinesiology and Health Promotion (K&HP) program is KIN 3021, Physiology of Exercise. The entry course for admission to the Physical Education Teacher Education (PHET) program is KIN 3012, Teaching Lab I. To be eligible, students must have completed all program course prerequisites and have a minimum cumulative grade point average of 3.000. Admission to the two majors is a competitive process and applicants meeting minimum requirements are not guaranteed admission to the major. Application to the K&HP major must be received by the Division of Kinesiology and Health no later than April 15 for fall admission and no later than November 20 for

spring admission. Application to the PHET majors is conducted only for fall. The application deadline is April 15.

Undergraduate Majors

The requirements to graduate with a Bachelor of Science degree in the majors offered by the Division of Kinesiology and Health are as follows:

I. Kinesiology and Health Promotion Major

A. FRESHMAN-SOPHOMORE YEARS

CHEM	1000 or 1020 (PN)	4
ENGL	1010 (COM1)	3
FCSC	1141	3
HLED	1006	3
KIN	1006	1
KIN/ZOO	2040	3
KIN/ZOO	2041	1
ZOO	3115	4
LIFE	1010 (PN)	4
MATH	1400, 1405, or 1450 (Q)	3
PHYS	1050 or 1110	4
PSYC	1000 (H)	3
STAT	2050 or 2070 (Q)	4
USP U.S. & Wyoming Constitutions (V)		3
USP First-Year Seminar (FYS)		3
USP Communication II (COM2)		3
USP Human Culture (H)		3

In the spring semester of their sophomore year, students must make application for admission to the final two years of the Kinesiology and Health Promotion (K&HP) program (professional program). This includes a $30.00 application fee, completion of coursework specific to the first two years of the program, a minimum grade point average of 3.000, and completion of a written essay. Admission to the K&HP program is a competitive process and applicants meeting the minimum requirements are not guaranteed admission to the major.

B. JUNIOR-SENIOR YEARS
(professional)

i. Required Courses (22 hours)

HLED	3020	3
KIN	3010	3
KIN	3021	4
KIN	3034 or 4020	3
KIN	3037 or 3038	3
KIN	3042	3
USP Communication III (COM3)		3

ii. HLED and KIN Electives (15 hours)

Students must complete a minimum of 15 credit hours of upper division HLED and/or KIN courses specific to one of three concentrations: (a) Fitness and Wellness; (b) Health Promotion; or (c) Medical and Therapeutic Sciences (pre-professional).

iii. Specialization Areas (19 hours) - 3000 or 4000 level courses

Students must complete a minimum of 19 credit hours of upper division coursework that complements their selected area of concentration (i.e., Fitness and Wellness; Health Promotion; or Medical and Therapeutic Sciences [pre-professional]).

iv. Internship or Research Experience (6-12 hours)

Students must complete at least six hours of Internship Experience or Research Experience that complements their selected area of concentration (i.e., Fitness and Wellness; Health Promotion; or Medical and Therapeutic Sciences [pre-professional]). Students must be certified in first aid and CPR prior to enrollment in KIN/HLED 4015.

Minimum Total Hours 120

II. Physical Education Teacher Education K-12

A. FRESHMAN-SOPHOMORE YEARS

CHEM	1000 or 1020 (PN)	4
ENGL	1010 (COM1)	3
FCSC	1141	3
HLED	1006	3
LIFE	1010 (PN)	4
MATH	1400, 1405, or 1450 (Q)	3
KIN	2000	2
KIN	2001	2
KIN	2003	2
KIN	2004	3
KIN	2005	2
KIN/ZOO	2040	3
KIN/ZOO	2041	1
ZOO	3115	4
PHYS	1050 or 1110	4
USP U.S. & Wyoming Constitutions (V)		3
PSYC	1000 (H)	3
STAT	2050 or 2070 (Q)	4
USP First-Year Seminar (FYS)		3
USP Human Culture (H)		3

In the spring semester of their sophomore year, students must make application for admission to the final two years of the Physical Education Teacher Education (PHET) program (professional program). This includes a $30.00 application fee, completion of coursework specific to the first two years of the program, a minimum grade point average of 3.000, completion of 60 contact hours with youth in a movement setting, completion of a written essay, and an interview. Admission to the PHET program is a competitive process and applicants meeting the minimum requirements are not guaranteed admission to the major.

B. ELECTED COURSEWORK

Students must complete a minimum of 6 credit hours of elected coursework beyond the credit hours listed under the Freshman-Sophomore Years. It is recommended that these courses are selected from those required for endorsements.

C. JUNIOR-SENIOR YEARS (professional)

i. Required Courses (54 hours)

EDSE	3540	2
KIN	3011	3
KIN	3012 (COM2)	3
KIN	3015	3
KIN	3021	4
KIN	3034	3
KIN	3037 or 3038	3
KIN	3042	3
KIN	3050	2
KIN	3060	3
KIN	4012	3
KIN	4013	2
KIN	4017	3
KIN	4055	2
KIN	4080 (COM3)	3
KIN	4099*	12

Minimum Total Hours 120

*Note: students must be certified in first aid and CPR prior to enrollment in KIN 4099.

III. Additional School Endorsements K-12

In addition to completing the Bachelor of Science degree in physical education teacher education from the University of Wyoming, students can qualify for K-12 endorsements in adapted physical education and/or health education by completing the following course requirements:

A. Adapted Physical Education K-12

KIN	4065	3
KIN	4075	3
EDEX	2484	3

B. School Health Education K-12

HLED	4025	3
HLED	4110	3
HLED	4120	3
HLED	4130	3
PSYC	2210	3

IV. Affiliated Options

The Division of Kinesiology and Health offers two options for the general undergraduate population. They require course work beyond degree requirements.

A. Athletic Coaching Endorsement

Students who wish to qualify for an athletic coaching permit to coach in Wyoming public schools must complete four courses.

CPR/First Aid Certification
KIN 3050.....2
KIN 4090.....3
Coaching in... Experience

B. School Health Education K-12

In addition to completing a bachelor's degree in teaching at the secondary level from an approved university program, 25 credit hours are required to be endorsed to teach health education K-12 in the public schools of Wyoming.

FCSC 1140 or 1141 2-3
HLED 1006.....3
CPR/First Aid Certification
HLED 4120.....3
HLED 4025.....3
HLED 4110 3
HLED 4130.....3
PSYC 2210.....3

Graduate Study

Program Specific Admission Requirements

Admission into the M.S. degree program is open to students who have obtained an undergraduate with a major program of study in exercise and sport science, health, kinesiology, physical education, or other area in the human movement sciences.

Students who do not have a bachelor's degree in kinesiology, physical education, or health are required to complete four undergraduate courses in kinesiology and/or health (e.g., HLED 3020 Community and Public Health; KIN 3034 Lifespan Motor Development; KIN 2040 Human Anatomy; KIN 3115 Human Systems Physiology; KIN 3037 Sport Psychology; etc.) above and beyond the master's program of studies.

Program Specific Graduate Assistantships

Graduate assistantships are available on a competitive basis. Teaching opportunities exist within the laboratory portions of the human anatomy and exercise physiology courses, the teaching laboratory portions of the pedagogy practical courses, HLED 1006, Personal Health. A graduate assistantship also involves some research opportunities with assigned graduate faculty advisors.

A stipend for a full time graduate assistant is $12,078.00 per academic year. Tuition and fees are covered according to the percentage of assistantship allocated to the student.

Program Specific Degree Requirements Master's Programs

Plan A (thesis)

Minimum of 30 credit hours
Minimum of 18 credit hours of HLED and/or KIN coursework
HLED/KIN 5085
Must choose at least one from this list: STAT 5050, 5060, 5070, or 5080; or EDRE 5600 or 5640
4 credit hours of HLED/KIN 5960 (Thesis Research)
Minimum of 9 credit hours of HLED/KIN coursework in area of specialization
Oral presentations of thesis proposal and defense

Plan B (non-thesis)

Minimum of 36 credit hours
Minimum of 18 credit hours of HLED and/or KIN coursework
HLED/KIN 5085
Must choose at least one from this list: STAT 5050, 5060, 5070, or 5080; or EDRE 5600 or 5640
3 credit hours of HLED/KIN 5080
Minimum of 3 credit hours of coursework selected from outside the Division of Kinesiology and Health
Plan B paper (written and oral)

M.S. in Kinesiology and Health Distance Education

The Division of Kinesiology and Health offers the M.S. degree in kinesiology and health (non-thesis) as a distance education program through the University of Wyoming Outreach School. The area of emphasis for the distance program is physical education teacher education. The program is structured such that students can pursue the M.S. degree on a part time basis off-campus. For more information visit our Web site at www.uwyo.edu/kandh.

Physical Education Activity (PEAC)

Program activity-theory courses for men and women. All activity classes are offered for S/U grade only, with the exception of 2000. Physical education activity courses may not be offered every semester.

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1000. P.E. Activity in ____. 1/2 (Max. 1). Provides instruction in special and/or unique sport, dance or exercise on a temporary basis.

1001. Physical Activity and Your Health. 1. [P◀▶(none)] Designed to help students gain an understanding of the impact physical activity or inactivity has on their health. Students gain the knowledge, skills, and experience that enable them to make informed decisions about their own health as it relates to their quality of life and longevity. **NOTE:** All students must enroll in a PEAC 1001 activity as part of the PEAC 1001 experience.

1012. Beginning Swimming. 1/2. Instructs the non-swimmer in skills suggested by the Red Cross.

2000. Wellness: Physical, Nutrition, and Lifestyle Concepts. 1-3 (Max. 9). Designed to present information on topics including (but not limited to): nutrition, mobility and injury prevention, sleep and stress management, sport psychology, ethics in sport and human performance, and methods of fitness. Also includes a physical activity component. Offered as S/U.

Varsity Athletics (PEAT)

(Men and Women)

The following activities are for enrollment only by members of intercollegiate athletic teams. Participation in these activities will not satisfy the PEAC requirements.

2010. Varsity Swimming. 1/2.

2051. Varsity Golf. 1/2

2054. Varsity Track and Field. 1/2.

2056. Varsity Tennis. 1/2.

2062. Varsity Basketball. 1/2.

2063. Varsity Football. 1/2.

2064. Varsity Volleyball. 1/2.

2065. Varsity Pepsters. 1/2.

2070. Varsity Rodeo. 1/2.

2071. Varsity Soccer. 1/2.

Kinesiology (KIN)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1004 [PEPR 1004]. Foundations of Physical Education. 3. [I,L◀▶(none)] An introductory course designed to acquaint first year or second year students to the academic discipline of physical education with an emphasis on the teaching career. Cross listed with HLED 1004.

1005 [PEPR 1005]. Kinesiology, Health, and Teaching Physical Activity. 3. [I,L◀▶(none)] A survey of the disciplines of kinesiology, health, and teaching physical activity. Students master knowledge specific to kinesiology, health, and teaching physical activity while developing critical thinking skills and basic competence in communication skills and information literacy.

1006. Introduction to Kinesiology and Health. 1. A survey of the disciplines of kinesiolgy and health and exposure to foundational literature in the field. *Prerequisite:* Majors only (Kinesiology and Health Promotion).

1040. Contemporary Topics in North American Sport. 3. [CH,D◀▶(none)] An introductory course that focuses on sport as an institution in North American society. A range of topics is explored from diverse perspectives (historical, sociological, psychological, political, and gender theories), so learners can critically examine what it means to be a part of "sport" in contemporary North American society.

1052 [PEPR 1052]. Introduction to Athletic Training. 3. Provides the prospective athletic trainer with the skill and knowledge necessary to improve a risk management and preventative program for athletes and others involved in physical activity.

1058 [PEPR 1058]. Emergency Management of Athletic Injury/Illness. 3. Provides the prospective athletic trainer with the skill and knowledge necessary to provide for emergency care, triage, and management of emergencies and life-threatening situations for the physically active.

1101. First-Year Seminar. 3. [(none)◀▶FYS]

2000 [PEPR 2000]. Movement Core I: Striking/Fielding and Invasion Games. 2. Exposes students to skill and tactical themes comprising striking/fielding and invasion games. Course aims for students' ability to understand, demonstrate and analyze the different offensive and defensive tactics that facilitate game play success in invasion (soccer, tag rugby, basketball) and striking/fielding (softball, cricket) games. *Prerequisites:* sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2001 [KIN 1025, PEPR 1025]. Movement Core II: Net and Target Games. 2. Exposes students to skill and tactical themes comprising net and target games. Course aims for students' ability to understand, demonstrate and analyze different offensive and defensive tactics facilitating game play success in net (volleyball, tennis, badminton) and target (archery) games. *Prerequisites:* sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2002 Movement Core III: Fundamental Motor Skills. 2. Designed to provide pre-service physical education teachers with the content and teaching strategies associated with teaching motor skills to school aged children grades K-5. Students learn both skill themes and movement concepts. Students have the opportunity to apply skills and knowledge in a practical experience with young children in a school based PE setting. *Prerequisites:* sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2003 [KIN 1000, PEPR 1000]. Movement Core IV: Educational Games and Gymnastics. 2. To provide pre-service teachers (PTs) with the skills and knowledge necessary to teach educational games and gymnastics to public school students. *Prerequisites:* sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2004 [KIN 3025, PEPR 3025]. Movement Core V: Fundamental Motor Skills, Creative Movement, and Dance. 3. [CA◀▶(none)] Designed for prospective physical education teachers K-12. Fundamental motor skills, dance, and creative movement and the associated teaching behaviors needed to teach this content to K-12 learners is the focus of this course. *Prerequisite:* Sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2005 [KIN 2025, PEPR 2025]. Movement Core VI: Physical Fitness and Physical Activity 2. Designed for prospective school-based physical and health education teachers K-12. Focuses on five primary content areas: what is fitness education and why do we need it; development of content-based fitness curriculum; teaching cognitive aspects of fitness education; teaching physical aspects of fitness education; and promoting fitness education. *Prerequisites:* sophomore standing, declared PHET major, completion or concurrent enrollment in MATH 1400.

2010 [PEPR 2010]. Field Experience for Prospective Elementary and Secondary Teachers. 1-4 (Max. 4). Provides initial experience in the public school setting. Full-time assignment of one to four weeks in a public school under supervision of a certified teacher. Students serve as teacher aides.

2012 [PEPR 2012]. Physical Education for Elementary Schools. 2. Emphasizes impact that a sound elementary physical education program can have on growth and development of healthy children. Students identify the need for a balanced physical education program. Focuses on curriculum, teaching styles, class management and instruction. *Prerequisite:* EDFD 2040 or consent of instructor.

2015 [PEPR 2015]. Methods of Teaching Social Dance Forms. 1. Develops a large repertoire in folk, square, round and social dance. Students acquire knowledge and confidence in methods of teaching these forms. *Prerequisite:* KIN 1031.

2017 [PEPR 2017]. Water Safety Instructors' Course. 1. Examines procedures and standards as required by the American Red Cross in analysis, performances and teaching techniques. Includes five styles of swimming and senior lifesaving. *Prerequisites:* 18 years of age and a current Senior Life Saving Certificate.

2040 [PEPR 2040]. Human Anatomy. 3. [SB◀▶(none)] Study of human structure in terms of its microscopic and gross anatomy. Provides students with adequate background to study human physiological function. The corresponding course, to be taken concurrently, is ZOO/KIN 2041. Cross listed with ZOO 2040. *Prerequisite:* LIFE 1000 or 1010.

2041 [PEPR 2041]. Human Anatomy Laboratory. 1. [SB◀▶(none)] A laboratory study of human structure in terms of human microscopic and gross anatomy. This laboratory course is designed to provide students with an adequate background to study human physiology and kinesiological function. *Prerequisite:* KIN/ZOO 2040 or concurrent enrollment in KIN/ZOO 2040.

2050. Socio-Cultural Aspects of Physical Activity, Exercise and Sport. 3. [(none)◀▶H] This course examines the role of physical activity, exercise and sport in the promotion of individual and collective physical health and wellness. Students will understand the historical, individual, socio-cultural, environmental and political factors that have shaped the role of these behaviors in contemporary U.S. society. *Prerequisites:* Completion of an FYS course, COM1.

2057 [PEPR 2057]. Assessment and Evaluation of Athletic Injury/Illness I. 3. Provides the prospective athletic trainer with the skill and knowledge necessary to evaluate and recognize upper extremity, cervical spine, and head injuries that occur to the athlete and physically active. *Prerequisites:* KIN 1052, 1058, 2040, and 2041; concurrent enrollment in KIN 2068.

2058 [PEPR 2058]. Assessment and Evaluation of Athletic Injury/Illness II. 3. Provides the prospective athletic trainer with the skill and knowledge necessary to evaluate and recognize lower extremity and spine injuries that occur to the athlete and physically active. *Prerequisites:* KIN 2057; concurrent enrollment in KIN 2078.

2068. Athletic Training Clinical I. 1. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 1052 and 1058 are applied in the clinical and field settings. *Prerequisites:* KIN 1052, 1058, 2040, and 2041; concurrent enrollment in KIN 2057.

2069 [PEPR 2069]. History and Philosophy of Sport. 3. Discusses history of sport with emphasis on contributions of Greeks and Romans. Studies influence of Scandinavian countries, Germany and other European nations, plus sports and games of the American Indians. Includes sports in the U.S. from colonial period through present and influence of selected educational philosophers on sports. (Offered fall semester)

2078. Athletic Training Clinical II. 1. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 1052, 1058, and 2057 are applied in the clinical and field settings. *Prerequisites:* KIN 2057 and 2068; concurrent enrollment in KIN 2058.

2080 [3090, PEPR 3090]. Coaching Football. 2. For those who wish to become proficient in skills and techniques of teaching fundamentals and team organization of modern football. Presents use of audiovisual materials for teaching and scouting purposes. *Prerequisites:* successful completion of USP core requirement I. (Offered spring semester)

2081 [3091, PEPR 3091]. Coaching Basketball. 2. For all men and women wishing to coach basketball. Presents organization of practice schedule, meeting the public, varsity travel and fundamentals of offense and defense. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2082 [3092, PEPR 3092] Coaching Track and Field. 2. For those interested in teaching or coaching track and field. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2083 [3093, PEPR 3093]. Coaching Swimming. 2. Acquaints students with many different aspects of aquatics; provides understanding of rhythmical parts of selected swimming strokes; explains water safety; discusses teaching and coaching aspect of a total swimming program. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2084 [3094, PEPR 3094]. Coaching Wrestling. 2. Acquaints and prepares students with theory and techniques involved in teaching and coaching wrestling. *Prerequisites:* successful completion of USP core requirement I. (Offered spring semester)

2085 [3095, PEPR 3095]. Coaching Volleyball. 2. Encompasses techniques of coaching volleyball with emphasis on skill analysis, strategy, team dynamics and training. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2086 [3096, PEPR 3096]. Coaching Gymnastics. 2. Helps students organize and administer competitive gymnastics program and introduces coaching and training philosophies used in gymnastics. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2087 [3097, PEPR 3097]. Coaching Baseball. 2. Encompasses theories and techniques of coaching baseball. Emphasizes team and individual position play. *Prerequisites:* successful completion of USP core requirement I. (Offered fall semester)

2088 [3098, PEPR 3098]. Coaching Tennis. 2. Examines techniques of coaching tennis. Emphasizes skill analysis, strategy and training. *Prerequisites:* successful completion of USP core requirement I. (Offered spring semester)

2089 [3099, PEPR 3099]. Coaching Soccer. 2. Explores techniques of coaching soccer. Emphasizes skill analysis, strategy, team dynamics and training. *Prerequisites:* successful completion of USP core requirement I.

2091 [PEPR 2091]. Rules and Techniques of Athletic Officiating I. 2. Surveys techniques and rules of athletic officiating. Emphasizes principles and procedures necessary to become an effective official. Laboratory experience in officiating is provided that covers the officiating aspects of football, cross country, basketball and wrestling.

2092 [PEPR 2092]. Rules and Techniques of Athletic Officiating II. 2. Surveys techniques and rules of athletic officiating. Emphasizes principles and procedures necessary to become an effective official. Provides laboratory experience in officiating, covering officiating aspects of swimming, volleyball, track and field and baseball.

2900. Topics In:__. 1-3 (Max. 3). Course Topics could include Peer Health Education, Current Issues in Health, etc. *Prerequisite:* sophomore standing.

3010 [PEPR 3010]. Fundamentals of Health and Fitness Assessment. 3. Students will learn the fundamental concepts of health appraisal, assessment of health-related fitness and physical fitness levels, individual and group exercise programming and leadership, and methods of behavioral change. Fitness will be discussed in both theoretical and practical terms with an emphasis on adults. Has lecture and lab components. *Prerequisites:* completed or concurrent enrollment in KIN 3021; 2.5 GPA.

3011 [PEPR 3011]. Teaching Methods in Physical Education K-12. 3. Develops knowledge, skills and understandings appropriate to successful participation in a class setting when functioning in the teaching role. *Prerequisites:* grade of C or better in KIN 3012 and 3034; 2.75 minimum GPA; concurrent enrollment in KIN 3015.

3012 [PEPR 3012]. Teaching Laboratory I. 3. [(none)◆▶COM2] Provides the opportunity to develop skills and acquire knowledge needed to teach physical education. Allows the opportunity for students to evaluate the motor status and progress of a preschool aged child, as well as plan and implement a developmentally appropriate motor program. *Prerequisites:* Completed KIN 1000, 1004, 1025, 2000, 2025, 3025, and THEA 3025; concurrent enrollment in KIN 3034; 2.5 GPA. (Offered fall semester)

3015 [PEPR 3015]. Teaching Laboratory II. 3. [WC◆▶(none)] Provides pre-service physical education teacher with skills, knowledge and principles of teaching through application of peer teaching and small group elementary school teaching. Emphasizes and practices program development, lesson planning and development of a physical education teaching unit. *Prerequisites:* grade of C or better in KIN 3012 and 3034; 2.75 minimum cumulative GPA; concurrent enrollment in KIN 3011, 4055 and 4080. (Offered spring semester)

3020 [PEPR 3020]. Observational Experience in Movement Science. 1-2 (Max. 6). Provides students with off-campus opportunity to observe professionals in the work place. Emphasis is placed on physical or occupational therapy. Conducted under supervision and arranged by coordinator of undergraduate programs. Offered S/U only. *Prerequisites:* sophomore status, consent of coordinator of undergraduate programs, 2.5 GPA.

3021 [PEPR 3021]. Physiology of Exercise. 4. Applies physiological principles to human physical activities. Emphasizes interaction of neuromuscular, circulatory and respiratory mechanisms as affecting, and affected by, immediate exercise situation and physical training. Includes laboratory. Cross listed with ZOO 3021. *Prerequisites:* QA, KIN/ZOO 2040 and 3115; minimum 2.5 GPA. (Offered fall and spring semesters)

3034 [PEPR 3034]. Lifespan Motor Development. 3. Studies lifespan motor development. Emphasizes developmental periods of infancy through adolescence. Gives attention to observation and analysis of motor behavior and movement performance of individuals across lifespan. *Prerequisites:* PSYC 1000; junior status; 2.50 GPA. (Offered fall semester)

3037 [PEPR 3037]. Sport Psychology. 3. Studies psychological theories and techniques applied to sport to enhance the performance and personal growth of athletes and coaches. Emphasizes the influence of personality, anxiety, motivation, social factors, and psychological skills training. P*rerequisite:* Admitted to the last two years of one of the programs in DK&H. *Prerequisites:* PSYC 1000, junior status and 2.50 GPA.

3038. Exercise Psychology. 3. Studies psychological theories for understanding and predicting health-oriented exercise behavior, including psychological intentions for increasing exercise participation and adherence. Emphasizes psychological and psychobiological responses to exercise. *Prerequisites:* admitted to the last two years of one of the programs in DK&H.

3040 [PEPR 3040]. Teaching Human Anatomy. 3. Students develop communication and teaching skills while expanding their knowledge in anatomy. Under faculty instruction, each student develops lecture and laboratory lessons for all human anatomy systems. Under direct faculty supervision, each student demonstrates their teaching skills through preparation of videotape segments and actual laboratory teaching experience in the lower-division human anatomy course. *Prerequisites:* KIN/ZOO 2040, junior status and consent of instructor.

3042 [PEPR 3042]. Biomechanics of Human Movement. 3. Introduces fundamental principles of human movement. Includes study and elementary analysis of human motion based on anatomical and mechanical principles. *Prerequisites:* KIN/ZOO 2040; PHYS 1050 or 1110 or 1210 or 1310; minimum 2.5 GPA.

3044. Concepts in Physical Therapy. 2. Introduce and expand student knowledge of physical therapy. Designed for students interested in applying to Physical Therapy (PT) school. Content includes history of PT, therapist role in healthcare, trends in PT education, and effective communication (written and verbal) to support and prepare for the PT application process. *Prerequisite:* ZOO 3115 or equivalent human systems psychology course.

3050 [PEPR 3050]. Prevention and Care of Athletic Injuries. 2. Encompasses theory and practical work in the field of athletic training. Strongly emphasizes prevention and care of athletic injuries, including wrapping and taping techniques. *Prerequisites:* junior status; LIFE 1000 or 1010; minimum 2.5 GPA.

3052 [PEPR 3052]. Rehabilitation of Athletic Injuries. 3. Provides a foundation of appropriate rehabilitation principles and techniques based on current research/rationale. The scope is inclusive of approaches applicable to common sports medicine problems. *Prerequisites:* KIN 2058 and 2078; minimum GPA of 2.50.

3058 [PEPR 3058]. Therapeutic Modalities for the Athletic Trainer. 3. Provides the prospective athletic trainer with the knowledge and skill necessary to use therapeutic modalities for the health care of the physically active. *Prerequisites:* KIN 3052 and 3068; minimum GPA of 2.50.

3060. Understanding Skill Acquisition for Teaching. 3. Addresses practical questions specific to teaching physical activity - who are my students, what skills am I teaching, how do I teach skills effectively? Examine such concepts as individual differences, nature of motor skills, content and structure of skill practice, and the art of giving feedback. *Prerequisites:* PSYC 1000 or equivalent; admission to professional program in PHET.

3068. Athletic Training Clinical III. 2. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 2057 and 2058 are applied in the clinical and field settings. *Prerequisites:* KIN 2058 and 2078; concurrent enrollment in KIN 3052; minimum GPA of 2.50.

3078. Athletic Training Clinical IV. 2. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 2057, 2058, and 3052 are applied in the clinical and field settings. *Prerequisites:* KIN 3052 and 3068; concurrent enrollment in KIN 3058; minimum GPA of 2.50.

3115. [KIN 2110, PEPR 2110]. Human Systems Physiology. 4. Covers the fundamental function(s) of the human body systems, from cells and tissues through organs and systems, focusing also on biological communication and homeostasis. Students learn how to interpret physiological data. Includes laboratory and tutorial sessions. Fulfills degree requirement in physiology subsection for zoology major. Cross listed with ZOO 3115. *Prerequisites:* At least ((C in CHEM 1020 or CHEM 1050) or B in CHEM 1000) and C in LIFE 1010.

4001 [PEPR 4001]. Short Course in Physical Education for Undergraduates. 1-6 (Max. 6). Highlights special topics in kinesiology at the undergraduate level, based on need. Maximum allowable credit is 6 semester hours. Offered S/U only. *Prerequisites:* junior status and 2.50 cumulative GPA.

4012 [PEPR 4012]. Curriculum Development in Physical Education. 3. Focuses on the design of K-12 school physical education programs. It provides opportunities to study alternative curriculum models, engage in the process of curriculum design, and examine policy and theoretical issues of concern to curriculum designers. *Prerequisites:* grade of C or better in KIN 3011, 3015 and 4080; 2.75 minimum cumulative GPA; concurrent enrollment in KIN 4017. (Offered fall semester)

4013. School Administration for the Health Sciences. 2. Provides teaching majors with information about staff-administrator relationships in school settings. Topics include principles of leadership, school organization and culture, legal issues, financial issues, building and facilities management. *Prerequisites:* senior status, acceptance into the Physical Education Teacher Education program, and minimum GPA of 2.75.

4015 [PEPR 4015]. Internship Experience in Kinesiology. 1-12 (Max. 12). Variable-credit (1-12) and S/U course required of Kinesiology and Health undergraduate majors to provide experiential learning in kinesiology and health in a real world setting. Intended to integrate theory and technique with practical application to expose students to areas of professional/career interest and assist with building professional careers. Cross listed with KIN 4015. *Prerequisites:* KIN 3010; KIN 3021; 2.5 grade point average.

4016. Research Experience in Kinesiology and Health. 1-6 (Max. 6). Offered to students who wish to gain a research experience in Kinesiology and Health. Meant for students who are interested in pursuing an advanced degree. Students may choose to complete KIN/HLED 4016 instead of KIN/HLED 4015. Cross listed with HLED 4016. *Prerequisites:* minimum junior standing; completed KIN 3021; minimum 2.50 GPA.

4017 [PEPR 4017]. Teaching Laboratory III. 3. Focuses on the application of teaching skills and the effective utilization of sport-

based curricular and instructional models in the secondary public school setting. *Prerequisites*: grade of C or better in KIN 3011, 3015, and 4080; 2.75 minimum cumulative GPA; concurrent enrollment in KIN 4012. (Offered fall semester)

4020. Motor Behavior. 3. Provides undergraduate majors in kinesiology and health the foundation of motor learning and control theories to be applied to decisions related to the enhancement of human performance. *Prerequisites:* PSYC 1000 or equivalent course; admission to professional program in K&HP.

4024. Physical Activity Epidemiology. 3. This course will examine physical activity from a public health perspective. Topics include study design, critical appraisal of research, assessment of physical activity, relationships between physical activity and health outcomes, and current issues in physical activity epidemiology. Dual listed with KIN 5024. *Prerequisite:* KIN 3021.

4025. Functional Movement Analysis. 3. Synthesize foundational kinesiology knowledge to analyze functional movement patterns and increase theoretical and practical knowledge necessary to obtain Functional Movement Screen certification. Integration of core kiesiology and biomechanics concepts to a human movement model. Opportunities and emphasis on basic fundamental movements and applying acquired skills in practical experiences. *Prerequisite:* KIN 3021.

4029 [PEPR 4029]. Methods of Training and Conditioning. 3. Gives students knowledge and experience needed to develop and lead exercise training programs. Of interest to teachers, coaches and fitness leaders. *Prerequisites:* junior standing, KIN 3021 and minimum 2.50 GPA. (Offered spring semester)

4042. Advanced Biomechanics. 3. Provides understanding of biomechanical theories and the application of biomechanical measurements to human movement in sports, training, and rehabilitation. Emphasis on using equipment to collect biomechanical data to answer research and clinical questions. Lecture and data collection topics include electromyography, force, balance, kinematics, and kinetics. *Prerequisites:* KIN 3042.

4052 [PEPR 4052]. General Medical Conditions for the Athletic Trainer. 3. Provides the prospective athletic trainer with the knowledge and skill necessary to recognize, manage, and refer the general medical conditions, disabilities and pathologies that occur to athletes and the physically active. *Prerequisites:* KIN 3058 and 3078; concurrent enrollment in KIN 4068; minimum GPA of 2.50. (Offered fall semester)

4055 [PEPR 4055]. Adapted Physical Education. 2. Presents skills necessary to plan, implement and evaluate individualized physical education programs in the least restrictive environment. Acquaints students with current laws, characteristics, assessment instruments and nationally validated programs in physical education for the disabled child. *Prerequisites:* KIN 3034 and 2.50 GPA. (Offered spring semester)

4056 [PEPR 4056]. Advanced Exercise Testing and Prescription. 4. Teaches foundational electrocardiography to perform graded exercise stress tests (GXT), performance of GXT's to health and diseased populations based on a health appraisal assessment. Knowledge used to develop comprehensive exercise prescriptions, make metabolic calculations. Emphasis on how physical activity, nutrition/weight management, and behavioral factors interact with exercise programming. Dual listed with KIN 5056. *Prerequisites:* completion of KIN 3010 and 3021; 2.5 GPA; CPR Certification.

4058 [PEPR 4058]. Organization, Administration, and Pharmacology for the Athletic Trainer. 3. Provides the prospective athletic trainer with the knowledge and skill necessary to better understand the pharmacology and administration of athletic health management. *Prerequisites:* KIN 3052 and 3068; concurrent enrollment in KIN 3058 and KIN 3078; minimum GPA of 2.50. (Offered spring semester)

4062. Applied Concepts in Human Aging. 3. Designed to integrate and apply concepts acquired in core KIN and HLED courses (e.g. human physiology, exercise physiology, health promotion, etc.) to the growing of older/aging adults. Age-related pathologies will be presented and discussed as will be the scientific method. *Prerequisites:* KIN 3021; minimum 2.5 GPA; junior standing.

4065 [PEPR 4065]. Resources in Adapted Physical Education. 2-3 (Max. 3). Offers flexible credit for students interested in pursuing intensive study of resources for adapted physical education. Required for state endorsement in Adapted Physical Education. *Prerequisites:* junior status, KIN 4055 and minimum 2.50 GPA.

4066. Biological Factors Influencing Exercise Performance. 3. Application of physiological responses to exercise to special conditions. A focus on skeletal muscle fiber typing and the importance of fiber type distribution in athletics. Factors like nutritional needs of athletes, use of ergogenic aids, the female and child athlete, exercise in "hostile" environments, and long term competitive events covered. *Prerequisite:* KIN 3021; 2.50 GPA.

4068. Athletic Training Clinical V. 3. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 3052 and 3058 are applied in the clinical and field settings. *Prerequisites:* KIN 3058 and 3078; concurrent enrollment in KIN 4052; minimum GPA of 2.50.

4074 [PEPR 4074]. Field Studies in _____. 1-5 (Max. 12). Offered only through extension services. Broad and flexible and can be utilized in numerous situations to meet local needs. (Credit in this course is not applicable toward advanced degrees.) Cross listed with HLED 4074. Offered for S/U grade only.

4075. Assessment in Adapted Physical Education. 3. Designed to provide an overview of the assessment process in adapted physical education. Developmentally and disability appropriate psychomotor assessments and procedures for administering them are examined. *Prerequisites:* KIN 4055, KIN 4080.

4080 [PEPR 4080]. Assessment in Physical Education. 3. [WC◀▶COM3] Provides prospective teachers with a thorough knowledge of learner assessment as applied to physical education K-12. *Prerequisites:* grade of C or better in KIN 3012 and 3034; 2.75 minimum cumulative GPA. (Offered spring semester)

4085 [PEPR 4085]. Honor Studies in Physical Education. 2-10 (Max. 10). Provides flexible credit for undergraduate honor students to study under distinguished faculty in a specialized academic area of interest at UW or any other approved college or university. *Prerequisites:* 3.000 cumulative GPA and admission to physical education honors program.

4086 [PEPR 4086]. Honors Seminar. 2. Independent study. Consists of in-depth application of experimental techniques and materials to appropriate academic areas which directly support students' majors. Offered for S/U grade only. *Prerequisites:* 3.000 cumulative GPA and admission to physical education honors program.

4088. Athletic Training Clinical VI. 3. Provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 3052, 3058 AND 4052 are applied in the clinical and field settings. *Prerequisites:* KIN 4052 and 4068; concurrent enrollment in KIN 4058; minimum GPA of 2.50.

4090 [PEPR 4090]. Foundations of Coaching. 3. Coaches must be effective teachers, trainers, fund-raisers, recruiters, motivators, administrators, and counselors. The major purpose of this course is to provide future coaches with current information about the eight domains of essential coaching skills identified in the NSSC. These domains include philosophy and ethics, safety and injury

prevention, physical conditioning, growth and development, teaching and communication, sport skills and tactics, organization and administration, and evaluation. Dual listed with KIN 5090. *Prerequisites*: junior status and 2.5 cumulative GPA.

4097 [PEPR 4097]. Individual Problems. 1-3 (Max. 6). Provides flexible credit for juniors and seniors who wish to undertake intensive study of a special problem in physical education. Offered S/U grade only. *Prerequisites:* junior status and 2.50 GPA.

4099 [PEPR 4099]. Student Teaching in Physical Education. 1-16 (Max. 16). Student teaching is the culminating experience required of all students in teacher education for graduation and recommendation for certification. Consists of full-time assignment of 16 weeks in an approved school station in Wyoming under supervision of an experienced, approved supervising teacher. Offered for S/U grade only. *Prerequisites:* Completion of KIN 4012 and 4017; 2.5 GPA; consent of coordinator of student teaching in physical education.

4900. Topics in:___. 1-3 (Max. 9) The study of current topics not included in more formal course offerings in kinesiology and health. *Prerequisite:* KIN 3021.

5001. Short Course. 1-6 (Max. 6). Used for special topics in physical education on the basis of need. Each department in the college may make offerings under this number, the maximum allowable credit for each department is 6 semester hours. Offered satisfactory/unsatisfactory only. *Prerequisite:* graduate standing.

5011. Understanding Variation of Human Movement. 3. Reconceptualize the variability of human movement using dynamical system theory as a new theorectical interpretations to the role of variability in motor behavior. Demonstrates how an understanding of variability can enhance the practice of educators, teachers, coaches, phsiotherapists, and developmental specialists. *Prerequisite:* One course in any of the following areas evaluated and enforced by Kinesiology and Health Registrar/Credential Analyst: Motor Behavior/Learning/Control/Development; Cognitive Psychology; Biomechanics of Human Movement; Human Systems Physiology.

5012. Curriculum Design in Physical Education. 3. Addresses current problems of curriculum design and development in physical education, including foundational concerns, curriculum anatomy (aims, goals, objectives, content, evaluation), and problems associated with design (scope, sequence, relevance, continuity, articulation, balance, and integration). *Prerequisite:* graduate standing, completion of a teacher certification program in physical education and teaching experience or permission of school.

5013. Spectrum of Teaching Styles. 3. Explores the range of teaching styles and the appropriateness of their uses. Cross listed with HLED 5013. *Prerequisite:* graduate standing.

5014. Teaching Tactics in Sport-Based Physical Education. 3. Introduces students to the instructional strategy of the Tactical Games Approach (Mitchell, Oslin, & Griffin, 2006) of teaching sport-based activities in physical education. Emphasis is on planning, implementing, assessing and evaluating the tactical approach within the K-12 physical education context. *Prerequisite:* graduate standing.

5016. Analysis and Supervision of Teaching in Physical and Health Education. 3. Introduces various evaluative and supervisory techniques which are designed to improve teaching effectiveness and student learning. Emphasis will be placed on utilizing various strategies of evaluation in instructional settings. *Prerequisite:* graduate standing.

5017. Research on Teaching Physical and Health Education. 3. Survey of techniques, paradigms, and findings of research on teaching. Cross listed with HLED 5017. *Prerequisite:* graduate standing.

5018. Psychology of Teaching Physical Education. 3. Weaves together theory, research, and practical information related to the psychological aspects of teaching physical education. It shows how you can use psychological principles and strategies to manage behavior, motivate students, achieve program goals, and establish a positive learning environment. *Prerequisite*: Acceptance into Kinesiology and Health Masters program.

5019. Instructional Models for Physical Education. 3. This course will introduce students to model-based instruction for physical education (Metzler, 2011). Emphasis will be placed on analyzing, planning, and implementing various instructional models within a K-12 physical education context. *Prerequisite:* graduate standing.

5020. Modalities and Administration in Athletic Training. 3. Emphasis on professional development and ability to research and compile information. Students will have opportunity to develop administrative skills related to the day-to-day operations of an athletic training room including budgeting, ordering, inventory, and facility maintenance. Students will develop an understanding of hiring practices within a healthcare facility. *Prerequisites*: Graduate level standing, NATA-BOC certification, and a Graduate Assistant Athletic Trainer in the Athletic Department.

5021. Pharmacology and Rehabilitation in Athletic Training. 3. Emphasis is on professional development and ability to research and disseminate information. Students will recognize and understand the pharmacokinetics of commonly prescribed medications in the athletic setting. Students will research injuries and develop rehabilitation programs to be presented to the athletic training staff and various medical providers within the community. *Prerequisites*: Graduate level standing, NATA-BOC certification, and a Graduate Assistant Athletic Trainer in the Athletic Department.

5022. Surgical Procedures and Post-operative Care. 3. Students will watch orthopedic surgeries and develop a sound understanding of common surgical techniques and procedures. Emphasis will be placed on understanding the anatomical structures, appropriate post-operative care, and rehabilitation techniques. *Prerequisites*: Graduate level standing, NATA-BOC certification, and a Graduate Assistant Athletic Trainer in the Athletic Department.

5023. Advanced Rehabilitation in Athletic Training. 3. Students will be provided opportunities to continue to increase their clinical evaluation skills and develop advanced rehabilitation protocols. Emphasis will be placed on the importance of using evidence based medicine and the ability to critically evaluate peer-reviewed research. *Prerequisites*: Graduate level standing, NATA-BOC certification, and a Graduate Assistant Athletic Trainer in the Athletic Department.

5024. Physical Activity Epidemiology. 3. This course will examine physical activity from a public health perspective. Topics include study design, critical appraisal of research, assessment of physical activity, relationships between physical activity and health outcomes, and current issues in physical activity epidemiology. Dual listed with KIN 4024. *Prerequisite:* KIN 3021.

5025. Exercise Physiology II. 2-4 (Max. 4). Provides interested students with an additional opportunity to study selected aspects of exercise physiology. Research and investigation are emphasized. *Prerequisite:* graduate standing.

5029. Methods of Training and Conditioning. 3. Upper-level applied exercise training and conditioning course aimed at giving students the knowledge and experience needed to develop and lead exercise training programs. It will be of interest to teachers, coaches, and fitness leaders. Dual listed with KIN 4029. *Prerequisite:* junior standing, KIN 3021 and a minimum 2.50 GPA.

5034. Lifespan Growth and Psychomotor Development. 3. Takes a scholarly approach to the subject of psychomotor development, with particular emphasis on the theoretical and scientific examination of motor behavior as it changes over time. Emphasis is placed on observing movement and analyzing changes in it. *Prerequisites:* graduate standing, KIN 3034 or equivalent.

5035. Sociology of Sport. 3. Study of the social aspects of sport and play. Includes concepts, research studies, and theories related to such topics as politics, economies, crowd behavior, religion, sexual identity and gender, and ethical and moral values related to sport. *Prerequisites:* graduate standing and a general sociology course.

5038. Advances in Research on Sport Expertise. 3. Examines the science behind the skill acquisition in sport and explores the application of science to optimal training for achieving and retaining elite performance. Different theories will be compared to reveal how "perfection" is made by "practice." *Prerequisites:* graduate standing with experience of taking undergraduate courses in Motor Behavior, Cognitive Psychology, Sport Psychology, or Coaching.

5039. Perception and Action in Motor Skills. 3. For graduate students who have general interest in understanding how the human perceptual system is coping with the human action system in performing skilled motor tasks. An overview of the existing theories and studies in the field will be provided with sufficient breadth and depth. *Prerequisite:* undergraduate prerequisite course in one of the following areas: Motor Behavior (Motor Learning, Control, or Development); Cognitive Psychology; Human Biomechanics; Human Physiology.

5046. Applied Biomechanics and Programming. 3. Understand advanced biomechanical theories and utilize MATLAB programming to perform signal process and calculate 3-dimensional ground reaction force, center of pressure, electromyography, and 2-dimensional and 3-dimensional kinematics and kinetics. Emphasize on computational biomechanics and code writing in MATLAB. *Prerequisite:* KIN 3042, graduate standing.

5047. Biomechanics in Sports. 3. Understand the biomechanics of selected sports and the procedures to perform biomechanical analysis of sports techniques. Understand the characteristics of different loadings and their effects on human bodies and the biomechanical mechanisms of sports injuries. *Prerequisite:* KIN 3042, graduate standing.

5056. Advanced Exercise Testing and Prescription. 4. Teaches foundational electrocardiography to perform graded exercise stress tests (GXT), performance GXTs to health and diseased populations based on a health appraisal assessment. Knowledge used to develop comprehensive exercise prescriptions, make metabolic calculations. Emphasis on how physical activity, nutrition/weight management, and behavioral factors interact with exercise programming. Dual listed with KIN 4056. *Prerequisites:* completion of KIN 3010 and 3021; 2.5 GPA; CPR certification.

5062. Applied Concepts in Human Aging. 3. Designed to integrate and apply concepts acquired in core KIN and HLED courses (e.g. human physiology, health promotion, etc.) to the growing population of older/aging adults. Age-related pathologies are presented and discussed as is the scientific method. Dual listed with KIN 4062. *Prerequisites:* KIN 3021; minimum 2.50 GPA; junior standing.

5080. Investigations in Kinesiology and Health. 1-3 (Max. 3). Designed to develop Master of Science level graduate students into critical consumers of research. An additional purpose is to develop research skills to the level necessary to complete a master of science Plan B paper. Cross listed with HLED 5080. *Prerequisite:* graduate standing.

5085. Research Methods. 3. Focuses on methods and techniques for evaluating and conducting research. Potential and completed research problems are analyzed and evaluated. Research processes are reviewed with emphasis on application. Standards for writing literature reviews and research proposals are also emphasized. *Prerequisite:* admission to the UW Division of Kinesiology and Health's graduate program.

5086. Qualitative Research Methods. 3. This course presents students with an introduction to qualitative research methods, designs, and analysis. This involves: creation of purpose statement and research questions, development of designs, hands-on data collection, data analysis, and writing up qualitative studies. Issues related to trustworthiness, ethics, credibility, and transferability of qualitative research will be addressed. *Prerequisite:* graduate standing.

5090. Foundations of Coaching. 3. Coaches must be effective teachers, trainers, fundraisers, recruiters, motivators, administrators, and counselors. The major purpose of this course is to provide future coaches with current information about the eight domains of essential coaching skills identified in the NSSC. These domains include philosophy and ethics, safety and injury prevention, physical conditioning, growth and development, teaching and communication, sport skills and tactics, organization and administration, and evaluation. Dual listed with KIN 4090. *Prerequisite*: graduate status.

5097. Individual Problems. 1-3 (Max. 6). Provides flexible credit for students who wish to undertake intensive study of a special problem identified in a regular class. Cross listed with HLED 5097. *Prerequisite:* graduate standing.

5536. Sport Psychology. 3. Examines theoretical, research, and professional issues in contemporary sports psychology. Basic research design, including quasi-experimental design are covered, particularly to discuss the outcome studies or proposed applications such as imagery and hypnosis. Development of applied sport psychology and proposed interventions with sport behavior are viewed in relation to the development of these approaches, related training issues and outcome research. Identical to PSYC 5536. *Prerequisites:* graduate standing, sport or general psychology course, and consent of instructor.

5537. Exercise Psychology. 3. Focuses on key conceptual issues and research in exercise psychology and the application of research findings in a variety of physical activity settings. Specific content areas include psychological benefits of physical activity, exercise adherence, public health and exercise issues, theory, and determinants of physical activity, interventions for adoption and maintenance, and professional ethics. *Prerequisites:* graduate standing, KIN 3037.

5586. Seminar. 1-6 (Max. 8). Graduate students in kinesiology and health work intensively on current issues and problems, and may pursue specific areas of emphasis. Although a total of 8 hours is permitted under this number, only 6 hours are allowed by the Division of Kinesiology and Health toward a student's graduate program. Cross listed with HLED 5586. *Prerequisite:* graduate standing.

5587. Special Problems. 1-6 (Max. 9). Provides a broad perspective through selected reading material and wherever possible the student collects and uses original information in practical school situations. All work is done independently under the direction of a faculty member. As many conferences are held as necessary to assure successful completion of the project. *Prerequisite:* consent of instructor and division director, graduate status.

5900. Practicum in College Teaching. 1-3 (Max. 3). Work in classroom with a major professor. Expected to give some lectures and gain classroom experience. *Prerequisite:* graduate standing.

5920. Continuing Registration: On Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5940. Continuing Registration: Off Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5959. Enrichment Studies. 1-3 (Max. 99). Designed to provide an enrichment experience in a variety of topics. Note: credit in this course may not be included in a graduate program of study for degree purposes.

5960. Thesis Research. 1-12 (Max. 24). Designed for students who are involved in research for their thesis project. Also used for students whose coursework is complete and are writing their thesis. *Prerequisite:* enrollment in a graduate degree program.

5980. Dissertation Research. 1-12 (Max. 48). Graduate level course designed for students who are involved in research for their dissertation project. Also used for students whose coursework is complete and are writing their dissertation. *Prerequisite:* enrollment in a graduate degree program.

5990. Internship. 1-12 (Max. 24). *Prerequisite:* graduate standing.

Health Education (HLED)

1006. Personal Health. 3. [(none)◀▶H] Introduces multiple concepts of personal health (e.g., physical activity, diet, stress, social pressure, public health, human behavior, disease prevention, healthe care access, and health-oriented citizenship) in relation to improving individual health and understanding the health of a society and cultural differences in human health and health behavior.

1221. Standard First Aid and Personal Safety. 1-2 (Max. 2). Studies accident prevention, examination procedures and first aid care for victims of accidents or sudden illness before medical assistance is available. Presents new Red Cross content and CPR. CPR is incorporated in the sections offered for 2 credit hours.

2006. Health for Elementary Educators. 1. Acquaints students to the Wyoming Health Standards and Benchmarks, techniques/instruments for assessing they Wyoming Health Standards and Benchmarks, sample health curriculum models/approaches for elementary school K-6, lesson plans in health education for elementary learners, and health integration in language arts curricula. *Prerequisite:* elementary education majors with sophomore standing.

2221. Instructor's Course in First Aid/CPR 2. Designed to certify the student to teach the following American Red Cross courses: CPR for the professional rescuer and First Aid: responding to emergencies. *Prerequisite:* current certification in First Aid/CPR.

2900. Topics In:__. 1-3 (Max. 3). Course Topics could include Peer Health Education, Current Issues in Health, etc. *Prerequisite:* sophomore standing.

3000. Foundations of Health Promotion and Health Education. 3. Introduces basic concepts and theories that form the foundation of the health promotion and education profession. Stresses experiences that are designed to acquaint students with the fundamentals of professional practice and to serve as a basis for future health promotion and education study. *Prerequisites:* HLED 1006, junior class standing, 2.5 GPA.

3020 [4050]. Community and Public Health. 3. Public health aim to create the conditions where people can be healthy. This course introduces goals and applications of community and public health work in the US, illustrated with case studies from the most urgent health issues facing our nation. *Prerequisites:* HLED 1006; sophomore or junior standing; admission to K&HP or K&HP-AT professional program or minimum 3.000 cumulative UW GPA.

4004. Needs Assessment and Program Planning. 3. Focuses on needs assessment and program planning in the health education process. Extensive time is spent learning, analyzing, and applying a variety of needs assessment methods. The impact of extensive community needs assessment on planning effective community programs and interventions are examined. Additional emphasis is placed on the methods necessary for planning effective health promotion programs. Dual listed with HLED 5004. *Prerequisites:* HLED 3000 and 2.5 GPA.

4005. Global Health in Modern Society. 3. Evidence-based approach to understand the interconnectivity of global health in modern society. Examination of health disparities, worldwide, to understand the impact of politics, culture, and economics on population health. Rural aspects of public health both domestically and internationally included. Students will discuss challenges and approaches to improving global public health.

4010. Program Evaluation and Grant Writing. 3. Provides students with an in-depth examination of program evaluation techniques and methodology as they apply to the evaluation of health promotion programs. Students gain an understanding of how to identify funding opportunities (grants) and how to prepare grant proposals. Dual listed with HLED 5010. *Prerequisites:* HLED 4004.

4015. Internship Experience in Health. 1-12 (Max. 12). Variable-credit (1-12) and S/U course required of Kinesiology and Health undergraduate majors to provide experiential learning in kinesiology and health in a real world setting. Intended to integrate theory and technique with practical application to expose students to areas of professional/career interest and assist with building professional careers. Cross listed with KIN 4015. *Prerequisites:* KIN 3010; KIN 3021; 2.5 grade point average.

4016. Research Experience in Kinesiology and Health. 3-6 (Max. 6). Offered to students who wish to gain a research experience in Kinesiology and Health. Meant for students who are interested in pursuing an advanced degree. Students may choose to complete KIN/HLED 4016 instead of KIN/HLED 4015. Cross listed with KIN 4016. *Prerequisites:* minimum junior standing; completed KIN 3021; minimum 2.50 GPA.

4020. Food, Health, and Justice. 3. Maps ways our dominant national and global food systems affect health and equity in health, largely though not only negatively. Students will critically assess practiced and potential strategies for creating alternative food systems that support health and equity, particularly at the U.S. community level. Dual listed with HLED 5020. *Prerequisites*: junior standing and above.

4025. Teaching Sensitive Issues In Human Sexuality. 3. Prepares educators and other helping professionals whose work involves promoting healthy sexuality in children, young people, and adults. It also provides detailed investigation into important aspects of teaching sensitive issues related to human sexuality. Students practice, critique, develop, and evaluate sexuality education processes and resources. Dual listed with HLED 5025. *Prerequisites:* junior class standing, 2.5 GPA, and SOC 2200.

4030. Teaching About Alcohol and Substance Abuse. 3. Introduces students to the issues of societal and personal attitudes towards alcohol and substance use, misuse and abuse. Prepares an educator to teach about alcohol and substance abuse in the classroom and our of the school setting.

4040. Stress Management. 3. The stress process and its relationship to the concept of total health. The physical and psychological effects of stressors and individual appraisals will be explained using theoretical models and practical examples. Students learn how to personally identify and manage stress in a healthy manner. Emphasis is placed on learning effective skills

to reduce harmful effects of stress. *Prerequisites:* junior class standing for HLED 4040 and graduate standing for HLED 5040.

4074. Field Studies in _____. 1-5 (Max. 12). Offered only through extension services. Broad and flexible and can be utilized in numerous situations to meet local needs. (Credit in this course is not applicable toward advanced degrees.) Cross listed with KIN 4074. Offered for S/U grade only.

4097. Individual Problems. 1-3 (Max 6). Provides flexible credit for students who wish to undertake intensive study and/or experiential activities in health education. Offered for S/U grade only. *Prerequisite:* consent of instructor.

4110. Teaching Health in Schools K-12. 3. Presented appropriate knowledge and skills to become health literate. Explore ways to teach health skills and knowledge and use assessment strategies for health education. *Prerequisite:* KIN 3015. (Offered fall semester)

4120. Assessment in Health. 3. Provide students with an understanding of components of a balanced assessment system in school health education. Students review the basics of standards-based health education and explore innovations in assessment that provide teachers and students with a more complete and authentic picture of student learning. *Prerequisites:* HLED 2006, HLED 4110, or certified teacher with experience teaching health in schools; undergraduates must be concurrently enrolled in KIN 4099, Student Teaching; certified teachers must have access to K-12 students.

4130. Management of Coordinated School Health Programs. 3. Reviews the coordinated school health program (CSHP) model and identifies research that supports the eight components of the model. Prepares students to advocate for CSHP and to develop the school infrastructure necessary to carry out such a program. Also prepares individuals to work with school from job settings outside the school. Dual listed with HLED 5130. *Prerequisites:* HLED 1006 and 3010, junior standing and 2.5 GPA. (Offered fall semester)

4900. Topics in:___. 1-3 (Max. 9) Integrates kinesiology and/or health concepts necessary for graduates in multiple professions. Provides experiential learning and training for success in allied healthcare fields. Students may develop and present projects that relate their education and training to a hypothetical workplace environment. *Prerequisite:* KIN 3021.

4970. Field Experience in Health Education. 1 - 12 (Max. 12). Offered as practical health education experience for senior level health education majors. Students may take from 1 -12 credits at a time for a required cumulative maximum of 12 credits. Broad and flexible and can be utilized in numerous situations to meet local needs. (Credit in this course is not applicable toward advanced degrees.) For S/U grade only. *Prerequisites:* senior standing and consent of instructor.

5004. Needs Assessment and Program Planning. 3. Focuses on needs assessment and program planning in the health education process. Extensive time will be spent learning, analyzing, and applying a variety of needs assessment methods. The impact of extensive community needs assessment on planning effective community programs and interventions will be examined. Additional emphasis will be placed o the methods necessary for planning effective health promotion programs. Dual listed with HLED 4004. *Prerequisite:* HLED 3000 or graduate status and a graduate course in research methods.

5010. Program Evaluation and Grant Writing. 3. Provides students with an in-depth examination of health promotion programs, evaluation techniques and methodology. Students will also gain an understanding of how to identify funding opportunities (grants) and how to prepare grant proposals. Dual listed with HLED 4010. *Prerequisite:* HLED 4004 or HLED 5004 and graduate standing.

5013. Spectrum of Teaching Styles. 3. Explores the range of teaching styles and the appropriateness of their uses. Cross listed with KIN 5013. *Prerequisite:* graduate status.

5016. Analysis and Supervision of Teaching Physical Education. 3. Students are introduced to various evaluative and supervisory techniques which are designed to improve teaching effectiveness and student learning. Emphasis is be placed on utilizing various strategies of evaluation in instructional settings. *Prerequisite:* graduate standing

5017. Research on Teaching Physical and Health Education. 3. Survey of techniques, paradigms, and findings of research on teaching. Cross listed with KIN 5017. *Prerequisite:* graduate standing.

5020. Food, Health, and Justice. 3. Maps ways our dominant national and global food systems affect health and equity in health, largely though not only negatively. Students will critically assess practiced and potential strategies for creating alternative food systems that support health and equity, particularly at the U.S. community level. Dual listed with HLED 4020. *Prerequisites*: graduate standing.

5025. Teaching Sensitive Issues in Human Sexuality. 3. Prepares educators and helping professionals whose work involves promoting healthy sexuality in children, young people and adults. Also provides detailed investigation into important aspects of teaching sensitive issues related to human sexuality. Students practice, critique, develop, and evaluate sexuality education processes and resources. Dual listed with HLED 4025. *Prerequisite:* junior class status, GPA of 2.5 and SOC 2200.

5035. Theories in Health Promotion. 3. Explores the variety of theories related to health education/promotion, comparing and contrasting them when necessary, synthesizing them when appropriate. An additional purpose will be to apply these theories to either a research problem/question or a practice setting. *Prerequisite:* graduate standing.

5040. Stress Management. 3. The stress process and its relationship to the concept of total health. The physical and psychological effects of stressors and individual appraisals are explained using theoretical models and practical examples. Students learn how to personally identify and manage stress in a healthy manner. Emphasis is placed on learning effective skills to reduce harmful effects of stress. Dual listed with HLED 4040. *Prerequisite:* graduate standing.

5050. Community and Public Health Promotion. 3. Identifying, understanding, and working with unique needs and assets of communities is emphasized, including ethnic, religious, and social structures. Planning and implementation of community health programs is stressed. Open but not limited to students interested in the following areas: healthcare, health promotion, public health, the schools. Dual listed with HLED 4050. *Prerequisite:* a minimum of 6 hours of coursework within the College of Health Sciences or min. of 9 hours of coursework within selected major.

5080. Investigations in Kinesiology and Health. 1-3 (Max. 3). Designed to develop master of science level graduate students into critical consumers of research. An additional purpose is to develop research skills to the level necessary to complete a master of science Plan B paper. Dual listed with KIN 5080. *Prerequisite:* graduate standing.

5085. Research Methods in Health Education. 3. Focuses on methods and techniques for evaluating and conducting research. Potential and completed research problems are analyzed and evaluated. Research processes are reviewed with emphasis on application. Standards for writing literature reviews and research proposals are also emphasized. Cross listed with KIN 5085. *Prerequisite:* admission to the UW Division of Kinesiology and Health's graduate program.

5097. Individual Problems. 1-3 (Max. 6). Provides flexible credit for students who wish to undertake intensive study of a special problem identified in a regular class. Cross listed with KIN 5097. *Prerequisite:* graduate standing.

5115. Interdisciplinary Early Childhood Seminar. 3. Advanced professional course for students interested in current trends and issues in early childhood development. Interdisciplinary in nature, drawing from research in communication disorders, kinesiology and health, elementary and early childhood education and special education, child and family studies, nursing, and psychology. Cross listed with EDEC, PSYC, and SPPA 5115. *Prerequisite:* graduate standing.

5130. Management of Coordinated School Health Programs. 3. Reviews the coordinated program (CSHP) model and identifies research that supports the eight components of the model. Prepares students to advocate for CSHP and to develop the school infrastructure necessary to carry out such a program. Also prepares individuals to work with school from job settings outside the school. Dual listed with HLED 4130. *Prerequisites:* HLED 1006 and 3110, junior standing and 2.50 GPA.

5586. Seminar in Health Education. 1-6 (Max. 8). Graduate students in kinesiology and health work intensively on current issues and problems, and may pursue specific areas of emphasis. Although a total of 8 hours is permitted under this number, only 6 hours are allowed by the Division of Kinesiology and Health toward a student's graduate program. Cross listed with KIN 5586. *Prerequisite:* graduate standing.

5587. Special Problems. 1-6 (Max. 9). Provides a broad perspective through selected reading material and/or experiential activities. All work is done independently under the direction of a faculty member. As many conferences are held as necessary to assure successful completion of the project. *Prerequisite:* consent of instructor and graduate standing.

5900. Practicum in College Teaching. 1-3 (Max. 3). Work in classroom with a major professor. Expected to give some lectures and gain classroom experience. *Prerequisite:* graduate standing.

5920. Continuing Registration: On Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5940. Continuing Registration: Off Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5959. Enrichment Studies. 1-3 (Max. 99). Designed to provide an enrichment experience in a variety of topics. Note: credit in this course may not be included in a graduate program of study for degree purposes.

5960. Thesis Research. 1-12 (Max. 24). Designed for students who are involved in research for their thesis project. Also used for students whose coursework is complete and are writing their thesis. *Prerequisite:* enrollment in a graduate degree program.

Life Sciences Program

138 Aven Nelson Building, /
(307) 766-4158
FAX: (307)766-2851
Web site: www.uwyo.edu/lifescience
Program Director: Mark E. Lyford

The Life Sciences Program consists of all LIFE prefix courses. These courses support the life science majors and several non-life science majors across campus. The number of LIFE courses taken by life science and other majors is determined by the departments that offer the majors. The curriculum intends to provide life-science majors with both breadth and depth in the basic life sciences, and non-science majors with exposure to key concepts in biology and an understanding of the connections between science and society. The program courses also expose students to the fields of cell and molecular biology, genetics, ecology, and evolution, and they familiarize students with the diversity of life on the planet. Courses within the curriculum address four fundamental goals at a level appropriate for each course: 1) Acquisition, Application and Synthesis of Knowledge, 2) Communication Skills, 3) Critical Thinking and Problem Solving, and 4) Research Skills.

For information on LIFE course offerings, please refer to the Life Sciences Program entry in the College of Arts and Sciences.

Division of Medical Education

Family Medicine Residency Programs
Casper: Stephan Trent, Director
(307) 233-6020
Cheyenne: Ronald L. Malm, Director
(307) 777-7911

WWAMI Medical Education Program
Laramie: Tim Robinson, Director
(307) 766-2496
Web site: www.uwyo.edu/wwami

Professors:
ALISON DOHERTY, Clinical Professor 2015.

Associate Professors:
LISA K. BRANDES, B.S. Kansas State University 1987; M.D. University of Kansas School of Medicine 1993; Clinical Associate Professor of Family Medicine 2012.
JAMES F. BROOMFIELD, B.S. University of Arkansas 1986; M.D. 1990; Associate Professor of Family Medicine, Cheyenne 2005, 1999.
RONALD L. MALM, B.S. University of Wyoming 1988; D.O. The University of Health Sciences, College of Osteopathic Medicine 1992; Associate Professor of Family Medicine, Cheyenne 2012, 2005, 1999.
DOUGLAS S. PARKS, B.S. Baker University 1978; M.D. University of Kansas 1984; Associate Professor of Family Medicine, Cheyenne 1999, 1993.
BETH ROBITAILLE, B.A. University of Notre Dame 1991; M.D. Creighton University School of Medicine 1995; Clinical Associate Professor of Family Medicine, Casper 2012, 2007, 2002.
STEPHAN N. TRENT, B.A. University of Tennessee 1973; D.O. University of Health Sciences 1980; Clinical Associate Professor of Family Medicine 2007, 2002.
BRIAN M. VEAUTHIER, B.S. University of Notre Dame 1996; M.D. Georgetown University School of Medicine 2001; Clinical Associate Professor of Family Medicine 2012.

Assistant Professors:
KIM R. BROOMFIELD, B.S. University of Wyoming 1987; B.S. 1988; M.D. University of Colorado 1992; Clinical Assistant Professor of Family Medicine Cheyenne 2012, 2009.
WHITNEY A. BUCKLEY, PharmD University of Wyoming 2004; Clinical Assistant Professor 2008.
MARIA A. CORNELIUS, Clinical Assistant Professor 2012.

JANNA CRUMPTON, Pharm.D. Creighton University 2011; Clinical Assistant Professor Cheyenne 2012.

ZACH DEISS, B.A. University of Wyoming 1979; M.D. Creighton University School of Medicine 1987; Clinical Assistant Professor of Family Medicine Casper 2012, 2010.

JOHN P. HEALEY, B.S. University of Wyoming 1979; M.S. University of Utah; M.D. Creighton University 1991; Clinical Assistant Professor of Family Medicine Cheyenne 2012, 2009.

CAROLINE KIRSCH RUSSEL, Clinical Assistant Professor 2012.

ROBERT M. MONGER, B.A. Augustana College 1988; M.D. University of Utah School of Medicine 1992; Clinical Assistant Professor 2008.

DIANE NOTON, B.S. University of Wyoming 1991; M.D. Creighton University 1995; Clinical Assistant Professor of Family Medicine Cheyenne 2009.

SHARON KARNES OLAND, B.S. University of Washington School of Medicine 1997; M.D. University of Washington School of Medicine 2001; Clinical Assistant Professor of Family Medicine Casper 2012.

THOMAS E. RADOSEVICH, B.S. University of Wyoming 1990; M.D. Creighton University School of Medicine 1999; Clinical Assistant Professor of Family Medicine 2012, 2008.

CORA SALVINO, B.S. Purdue University 1975; M.D. Chicago Medical School 1978; Clinical Assistant Professor of Family Medicine Casper 2010.

G. DOUGLAS SCHMITZ, B.S. and M.D. University of Nebraska Medical School 1979; Clinical Assistant Professor 2008.

AMY TRELEASE-BELL, B.S. University of Wyoming 1992; M.D. Creighton University School of Medicine 1996; Clinical Assistant Professor of Family Medicine, Cheyenne 2012, 2004.

CYNTHIA WORKS, Clinical Assistant Professor 2012.

PATRICK A. YOST, B.S. University of Wyoming 1994; M.D. Creighton University 1999; Clinical Assistant Professor of Family Medicine Cheyenne 2012, 2009.

The Division of Medical Education provides opportunities for qualified Wyoming students to pursue careers in medicine; supports both undergraduate and graduate medical education programs; promotes high quality continuing education in medicine and other health care fields for Wyoming providers; facilitates increased accessibility of health and medical services in remote and shortage areas; supports interdisciplinary clinical training; and works closely with the Center for Rural Health Research and Education to promote research and programs to address rural/frontier health delivery concerns.

The University of Wyoming medical contract program enhances medical education opportunities for Wyoming residents. In March 1996, the University of Wyoming became a partner in the WWAMI (Washington, Wyoming, Alaska, Montana, Idaho) Program. As a result, students accepted into the medical contract program attend the University of Washington School of Medicine. The first year of this program is taught on campus at the University of Wyoming. The doctor of medicine degree is awarded by the University of Washington. For further information, contact the Preprofessional Advising Office, College of Health Sciences, Laramie, Wyoming 82071, (307) 766-6704.

Because of the need for broadly trained primary care physicians in Wyoming, the Wyoming Legislature has established two residency programs in the specialty of family medicine. These two accredited, university-administered, community-hospital based family medicine residency programs are located in Casper and Cheyenne. They enroll up to 42 residents (14 in each of three years). The two family medicine centers are among the most modern and comprehensively equipped facilities of their kind in the nation and maintain a 1:4 faculty to resident ratio. The program at Casper began in 1976 and is affiliated with Wyoming Medical Center. The program utilized the services and facilities provided by the Community Health Center of Central Wyoming. The Cheyenne program became active in 1980 and is affiliated with United Medical Center. The program utilizes the services and facilities provided by the Veterans Administration and the FE Warren AFB hospitals also located in Cheyenne. Both centers utilize modern design and include spacious examining rooms; treatment and casting rooms; x-ray facilities; offices for faculty, residents and staff; complete laboratories; multiphasic research areas; conference rooms; business offices and roomy waiting rooms with play areas in the clinical component. In the educational component, both include large auditoriums, several classrooms; audio visual production centers; medical libraries; learning resource centers and administrative offices. Particular emphasis in both centers is placed on preparing physicians for rural practice and other facets of medical practice that are unique to Wyoming.

Wyoming WWAMI Medical Education Program

FIRST YEAR: Fall		Hrs.
HM	6602	2
HM	6603	2
HM	6610	8
HM	6620	7
	Total Hrs.	19

FIRST YEAR: Spring		Hrs.
HM	6602	2
HM	6603	2
HM	6630	11
HM	6640	3
HM	6650	7
	Total Hrs.	25

Graduate Study

The Division of Medical Education provides graduate medical (residency) education for physicians in the specialty of family medicine. The university supports two fully accredited family medicine residency programs in Casper and Cheyenne with a capacity for 42 residents (14 in each of the three years). The Casper program began in 1976 and is affiliated with the Community Health Center of Central Wyoming and the Wyoming Medical Center. The Cheyenne program opened in 1980 and is affiliated with Cheyenne Regional Medical Center. In addition, the Cheyenne program has a close working relationship with the Veterans Administration Hospital. The residency programs are housed in two family medicine centers acclaimed to be among the most modern and comprehensively equipped facilities of their kind in the nation. Particular emphasis is placed on preparing physicians for rural practice and addressing those facets of medical practice that are unique to Wyoming.

In 1997, the University of Wyoming joined the University of Washington's WWAMI Program to provide undergraduate medical education for the students of Wyoming. Medical students accepted into this program (WWAMI) take their first year of classes on campus at the University of Wyoming. Students interested in this program should contact the WWAMI office in the College of Health Sciences at (307) 766-2496.

Human Medicine (HM)

6506. Clinical Preceptorship. 1. Students spend one morning or afternoon per week for approximately 10 weeks in a clinical setting. Students observe the practice of the physician and engage in one on one feedback sessions with the physician. The goal of the experi-

ence is to become comfortable in the clinical setting, observe clinical techniques, observe the patient-doctor interactions, and observe the healthcare team. Students should have an opportunity to discuss professional and personal aspects of a particular specialty practice including the business side of the practice. *Prerequisite:* enrollment in or completion of HM 6513, 6522, or 6535.

6510. Microscopic Anatomy: Histology. 4. Lecture/laboratory in microscopic anatomy designed to provide principles/concepts of histology, define morphological characteristics of cells, tissues, organs of human body and relate this information to functional processes studied in concurrent and subsequent courses. For S/U only. *Prerequisites:* admission to the WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6511. Anatomy and Embryology. 6. Structural organization of human body at the macroscopic level to provide a foundation for physical examination and functional assessment of the human organism. Integrates embryological development with study of cadaver and examination of normal living body. Concentrates on exploration of the body cavities and viscera they contain. For S/U only. *Prerequisites:* admission to the WWAMI program or consent of instructor and approval of WWAMI coordinator or the dean of the College of Health Sciences.

6512. Mechanisms in Cell Physiology. 4. Physiology of cell membrane, ionic and electrical gradients; active transport, excitability, action potentials; biophysics of sensory receptors; neuromuscular transmission; muscle energetics/contractility; spinal reflexes and central synaptic transmission; autonomic nervous system; energy metabolism and temperature regulation; epithelial transport; gastrointestinal motility and secretions. For S/U only. *Prerequisites:* admission to the WWAMI program or consent of instructor and approval of WWAMI coordinator or the dean of the College of Health Sciences.

6513. Introduction to Clinical Medicine. 1. Instruction in communication skills and interview techniques to form the basis for the doctor-patient relationship and for the skills of communication with patients. The patient profile is obtained. Attention to developing comfort in the physician role. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6514. Biochemistry 1A. 3. First portion of a coordinated course covering classical molecular and cellular biochemistry, cellular physiology and molecular genetics. Metabolic interrelationships as they occur in the individual are stressed and related to disturbances in disease states. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or the dean of the College of Health Sciences.

6516. Systems of Human Behavior. 3. Sensitizes students to the impact of such factors as emotional and physical development, cultural backgrounds, social roles, families, sexual identities and belief systems upon their effectiveness as physicians. Teaches skills in analyzing behavior, defining behavioral objectives and designing precise treatment strategies to attain these objectives. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or the dean of the College of Health Sciences.

6521. Microbiology and Infectious Disease 1A. 4. Pathogenesis and immunity of infectious diseases, natural barriers. Microbiology, epidemiology, clinical manifestations and control of representative bacterial, fungal, parasitic and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization, principles of asepsis, nosocomial and iatrogenic infections and their prevention. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or the dean of the College of Health Sciences.

6522. Introduction to Clinical Medicine. 2. Medical history is introduced and instruction in data collection is begun. Experience in conducting medical interviews with patients to obtain the medical history and patient profile. Special problems related to interviewing are addressed. For S/U Only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6523. Introduction to Immunology. 2. Basic concepts such as antigens; antibodies; complement; B- and T-lymphocyte functioning, including interactions with each other and with accessory cells; immunological tolerance; major histocompatibility complex; and role of these basic concepts in immunopathology (immunodeficiencies, hypersensitivities, autoimmunity, blood transfusion, and transplantation). For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6524. Biochemistry 1B. 2. Second portion of a coordinated course covering classical molecular and cellular biochemistry, cellular physiology and molecular genetics. Metabolic interrelationships as they occur in the individual are stressed and related to disturbances in disease states. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6531. Anatomy of Head and Neck. 4. Gross anatomy (including skull, pharynx and larynx), audition and balance, physiology and clinical evaluation, maxillofacial disorders, diseases of nasal passages, nasopharynx and oropharynx, accessory sinuses. Physical examination. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6532. Nervous System. 5. Integrated approach to normal structure and function of the nervous system, including the eye. Neuropathological examples, as well as clinical manifestations of neurological disease are presented. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6534. Microbiology and Infectious Disease 1B. 2. Pathogenesis and immunity of infectious diseases, natural barriers. Microbiology, epidemiology, clinical manifestations and control of representative bacterial, fungal, parasitic and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization, principles of sepsis, nosocomial and iatrogenic infections and their prevention. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6535. Introduction to Clinical Medicine. 3. Adult screening physical examination is taught through the use of lecture, audiovisual aids, and small group tutorial, where students in supervised setting practice the physical examination on one another. Further practice in the performance and recording of the patient profile and medical history. For S/U only. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6553. Musculoskeletal System. 5. Gross, surface, applied and X-Ray anatomy of system including entire spine but excluding head and neck. Histology of bone, cartilage, tendon-myotendinal junction and joints. Musculoskel-

etal trauma and healing. Pathology and clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders. Physical examinations. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or Dean of the College of Health Sciences.

6590. Medical Information for Decision Making. 1. Evidence Based Medicine (EBM) is now the predominant model by which medicine is practiced. The goal is to forge critical thinking skills and to teach analysis of the medical literature as a tool. *Prerequisites:* admission to WWAMI program or consent of instructor and approval of WWAMI coordinator or dean of the College of Health Sciences.

6602. Introductory Primary and Continuity Care Clerkship. 2. Introduces medical students to continuity of care by working with practicing physicians. The course demonstrates how to work with an individual to help them achieve optimal health, and includes topics in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral helth and pain management. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6603. Clinical Studies. 2. Instruction in communication skills, interviewing techniques, physical examination, documentation and clinical reasoning. The course will include hospital based patient encounters and developing comfort and introduction to the physical role. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6610. Molecular and Cellular Basis of Disease. 8. Introduces cell physiology and cell biology, function, genetics, and genetic diseases, genes. Topics include membrane physiology; sensory receptors; muscle energetics and contractibility; autonomic nervous system; tissue response to disease; pharmacodynamics and pharmacokinetics; genetic disorders; pharmacogenetics. Incorporates relevant fundamental principles in anatomy, pathology, and pharmacology. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6620. Invaders and Defense. 7. Systems addressed include the immune system, microbial biology, infectious diseases, inflammation and repair, and skin and connective tissue. Topics discussed include the pathogenesis and immunity of infectious disease, immunodeficiencies, hypersensitivity, autoimmunity, the basis of immunologic diagnostics. Additionally, this course will include relevant fundamental scientific principles in anatomy, pathology, and pharmacology. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6630. Circulatory System. 11. Provides an interdisciplinary approach to cardiovascular, respiratory, and renal-urinary medicine, including anatomy, physiology, radiology, patholoy, medicine, and surgery. Topics include cardiac electrophysiology and cardiac muscle mechanics, myocardial infarction and cardiac repair, thoracic and pulmonary anatomy, ventilatory mechanics, gas exchange, obstructive, restrictive, and pulmonary-vascular diseases, renal function, and common kidney diseases. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6640. Blood and Cancer. 3. Introduces students with the basic pathophysiologic mechanisms leading to disturbances of red cell, white cell, and platelet production, as well as abnormalities of hemostasis presenting clinical problems, with an emphasis on pathophysiology. Additionally, this course will include relevant fundamental scientific principles in anatomy, pathology, and pharmacology. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

6650. Energetic and Homeostasis. 7. Integrates discussions of metabolism, nutrition, obesity, diabetes, gastrointestinal/liver physiology and endocrinology, including physiology and pathology of digestion and hepatic function, principles and practice of clinical nutrition, endocrine metabolism, and clinically important endocrine pathophysiology. Relevant anatomy, pathology and pharmacology of the endocrine and gastrointestinal systems will be covered. *Prerequisite:* Must be enrolled in the WWAMI Medical Education Program.

Microbiology Program

Program Director: Gerard P. Andrews
Phone: (307) 766-3139
FAX: (307) 766-3875
E-mail: gandrews@uwyo.edu

The Bachelor of Science degree program in microbiology is organized as an interdepartmental major involving the collaborative teaching, advising and research expertise of more than 20 microbiology faculty from the Colleges of Arts and Sciences, Agriculture and Health Sciences. The program is administered by a program director and a coordinating committee which represents each of the participating colleges. Students may obtain their degree in the College of Agriculture and Natural Resources and Natural Resources. Please see the Microbiology section under the College of Agriculture and Natural Resources for list of faculty and program information.

Fay W. Whitney School of Nursing

351A Health Sciences Center,
(307) 766-4312
FAX: (307) 766-4294
Web site: www.uwyo.edu/Nursing
Dean: Mary E. Burman
Associate Dean: Susan H. Steiner

Professors:

DIANE BOYLE, B.S.N. University of Maryland 1974; M.S.N. University of North Carolina 1982; Ph.D. University of Kansas 1990; Professor of Nursing 2013; Wyoming Excellence Chair in Nursing.

MARY E. BURMAN, B.S.N. University of Minnesota 1983; M.S. University of Michigan 1986; Ph.D. 1990; Professor of Nursing 2003; Dean of Nursing 2008.

PAMELA N. CLARKE, B.S.N. Wayne State University 1969; M.P.H. University of Michigan, Ann Arbor 1971; Ph.D. Wayne State University 1983; Professor of Nursing 2003.

ANN MARIE HART, B.S.N. Medical College of Virginia 1991; M.S. University of Wyoming 1996; Ph.D. University of Colorado Health Sciences Center Denver 2003; Professor of Nursing 2015.

Associate Professor:

MARY ANNE PURTZER, B.S.N. University of Nebraska 1975; M.A. University of Wyoming 2002; M.S. 2005; Ph.D. 2007; Associate Professor of Nursing 2014.

JENIFER THOMAS, B.S. Colorado State University 1994; M.S. Avila University 2000; M.S. Colorado State University 2007; Ph.D. 2008; Associate Professor of Nursing 2016.

Assistant Professors:

REBECCA CARRON, B.S.N. Texas Christian University 1976; B.A. University of Wyoming 1997; M.S. 2006; Ph.D. University of Colorado 2014; Assistant Professor of Nursing 2014.

SHELLY FISCHER, B.S. University of Iowa 1982; M.S. University of Colorado Heath Sciences 1995; Ph.D. University of Colorado, Anschutz Medical Campus 2014; Assistant Professor of Nursing 2013.

SARAH KOOIENGA, B.S.N. Rush University 1983; M.S.N. University of North Carolina at Chapel Hill 1988; Ph.D. Oregon Health Sciences University 2006; Assistant Professor of Nursing 2014.

LORI LIEBL, B.S.N. Regis University 2008; M.S. 2009; Ph.D. University of Nebraska Medical Center 2015; Assistant Professor of Nursing 2015.

Clinical Associate Professor:
SUSAN H. STEINER, B.S.N. University of Michigan, Ann Arbor 1971; M.S. University of Wyoming 1988; Ph.D. 2001; Clinical Associate Professor 2009; Associate Dean of Nursing 2009.

Clinical Assistant Professor:
ESTHER GILMAN-KEHRER, B.S.N. University of Wyoming 1986; M.S. 1998; D.N.P. University of Colorado 2012; Clinical Assistant Professor 2014.
NANCY MCGEE, B.S.N. University of Wyoming 2005; M.S. 2007; D.N.P. University of Northern Colorado 2014; Clinical Assistant Professor 2015.
J'LAINE PROCTOR, B.S.N. University of Wyoming 2000; M.S. 2003; Certificate-PMHNP 2007; D.N.P. University of Northern Colorado 2014; Clinical Assistant Professor 2014.

Senior Lecturer:
Holly Miller

Associate Lecturers:
Mary Sue Hager, Linda Johnson, Kimberly Raska, Sherrie Rubio-Wallace, Rachel Thomas, Candace Tull, Linda Williams

Assistant Lecturers:
Cheri Bellamy, Elizabeth Goodwin, Marilyn Hall, Candace Stidolph, JoHanna Wedemeyer, Ann Wislowski

Adjunct and Part-time Faculty:
Amy Aldrich, Anna Atkinson, Karen Benjamin, Nicole Brodrick, Cate Campisi, Carol Susan Christman, Connie Coleman, Carrie Deselms, Chris DeYoung, Ann Enlow, Michael Enright, Marlene Ethier, Dawn Ford, Mary Gills, Julian Good, Nancy Granum, Debra Hamilton, Julie Hummer-Bellmeyer, Barbara James, Melanie Kawulok, Paula Kihn, Carol Kobulnicky, Cheryl Koski, Jill Leinen, Sue Lowe, Teri Lund, Jamie Mathews, Amanda Molski, Marcia Newell, Kristy Nielson, Jeanine Niemoller, Jennifer Painter, Shawn Petrini, Michael Rice, Barbara Robinson, Phyllis Schultz, Cheryl Smith, Cynthia Smith, Tanya Sorrell, Rhonda Stark, Gayle Tanaka, Veronica Taylor, Lisa Thompson, Weldonna Toth, Reba Traylor, Brenda Vance, Holly Vause, Tracy Wasserburger, Mary Weber, Clarann Weinart, Robert Weinland, Wendy Wood, Cheryl Wrasper

Emeriti:
Beverly Taheri-Kennedy, Beverly McDermott, Fay W. Whitney, Norma Wilkerson

The Fay W. Whitney School of Nursing (FWWSON) has well established undergraduate and graduate programs. Undergraduate and graduate curricula at the FWWSON are based upon our philosophy of nursing (as outlined on the nursing website) and specified professional documents. The Essentials documents for baccalaureate and master's programs from the American Association of Colleges of Nursing serve as the primary foundation.

Mission

As a leader in professional nursing, outreach, and rural health, the FWWSON educates, conducts research and provides service and practice for the purpose of improving, protecting and promoting health.

Accreditation and Membership

The baccalaureate and graduate programs are accredited by the Commission on Collegiate Nursing Education (CCNE).

The baccalaureate program (Basic BSN, BRAND, and RN/BSN Completion) is approved by the Wyoming State Board of Nursing (WSBN). Graduates of the Basic BSN and BRAND options are qualified to apply for admission to the licensing examination offered by the board. Graduates of the DNP Program are eligible to take the national certification exam as a nurse practitioner.

Technical Standards for Admission

All nursing students must be able to perform the essential functions of a nurse, including observation/sensory motor; communication; psychomotor; intellectual-conceptual, integrative and quantitative; and behavioral and social attributes. Please refer to the "Technical Standards for Admission", including information on reasonable accommodations, on the school's website: http://www.uwyo.edu/nursing/programs/technical-standards-for-admission.html.

Background Checks Requirement

Students enrolled in clinical training programs within the College of Health Sciences are placed in educational and clinical settings where highly vulnerable clients such as minor children, individuals with disabilities, and/or the elderly, are routinely served. These clinical/practice training sites (including schools, hospitals, pharmacies, and other university sites) routinely require criminal background checks for all students who engage in clinical activities. Therefore, background checks shall be required on all applicants to programs in the College of Health Sciences prior to admission into their prospective program.

Students applying for admission into the nursing major component of the BSN Program, the MS Program and Certificate Program (post-master's), and the DNP Program will be notified by the FWWSON at the time of any admission offer the process for completing the required background check. Previous background checks (e.g. CNA Certification, LPN or RN Licensure) are not acceptable to fulfill this expectation. The results of the background check may determine final admittance to the program.

Students may also be required to update the criminal background check. Each clinical training site will be informed that students have passed a background check prior to placement at that site; some sites may require a more current background check. Clinical agencies may bar a student access to their facility for clinical experiences based on the results of the background check. If faculty and staff are not able to place the student in an alternative setting, the student will not be able to complete the program. In addition, students seeking readmission into the program are required to complete a new background check. Students are responsible for the costs associated with the admission background check and any other background checks that may be required.

Drug Screening Requirements

Drug screening may be required by some clinical training sites. Students will be notified by the FWWSON should this be an expectation of them. Students may incur charges for this screening and will be notified of such at that time. Drug and/or alcohol testing for any student can be requested by the FWWSON.

Cost of the Program

University fees, testing fees, and special supplies are paid for by nursing students. A variety of clinical facilities in and out of state are used in the application of knowledge. Responsibility for travel arrangements to the clinical areas rests with the student.

Bachelor of Science in Nursing (BSN) Program

The Fay W. Whitney School of Nursing provides a curriculum based on the solid foundation of a general studies program. University students are individuals who come with learning preferences, different experiences, varied goals, and therefore, have unique learning needs. The primary responsibility of faculty is to empower students to become self-directed learners. Active learning is a teaching/learning partnership.

Undergraduate Program Outcomes - BSN Program

1. Synthesize knowledge from the arts and sciences in the practice of professional nursing.

2. Demonstrate leadership by application of quality improvement processes in the provision of safe client care across the lifespan.

3. Demonstrate evidence-based practice in the care of clients, families, and communities.

4. Manage data, information, and technology to inform and guide nursing practice.

5. Engage in political and regulatory processes relevant to health care systems and the provision of safe care.

6. Collaborate with the interprofessional team in the delivery of evidence-based client-centered care.

7. Use health promotion, disease prevention, and risk reduction strategies in caring for clients, families, and communities.

8. Demonstrate behaviors that reflect the nursing code of ethics, professional and legal standards, and the values of nursing as a caring profession.

Graduates receive the Bachelor of Science in Nursing (BSN) degree, and upon successful completion of the licensure examination, are eligible to practice as registered nurses. Completion of the baccalaureate degree is a requirement for admission to graduate study leading to advanced nursing practice.

Bachelor of Science in Nursing (BSN) Program Options

The Fay W. Whitney School of Nursing offers a baccalaureate program with three options to obtain the BSN degree:

1. Basic BSN – a four-year, on-campus BSN option for the student wishing to become a registered nurse at the baccalaureate level.

2. Bachelors Reach for Accelerated Nursing Degree (BRAND) – an accelerated BSN outreach option for the student who has already achieved a previous non-nursing baccalaureate degree and wishes to become a registered nurse at the baccalaureate level.

3. RN/BSN Completion – an online BSN completion option for the registered nurse who wishes to become a baccalaureate prepared nurse.

Please refer to the appropriate program option section that follows below.

Basic BSN

This option is a four-year on-campus BSN program option for students who are interested in becoming a registered nurse.

Second baccalaureate degree seeking students have the choice of pursuing Basic BSN or BRAND *(see information under that heading)*.

Admission

Basic BSN has two different admission entries. Criteria for admission as well as application instructions and deadlines can be found on the nursing website: http://www.uwyo.edu/nursing (click on Programs, Basic BSN).

Freshman Admission to the Nursing Major

Freshmen who are admitted to the nursing major will begin the clinical component of the Basic BSN option in the spring semester of the sophomore year. Students must successfully complete the pre-clinical coursework outlined in the first three semesters of the Basic BSN Program of Study on the first attempt with a minimum 3.000 nursing grade point average (NGPA).

Non-Freshman Admission to the Nursing Major

Transfer students and others who are completing the pre-clinical courses may apply for any unfilled seats in the clinical component of the nursing major. Admission is a competitive process and the number of unfilled seats may be very limited. Completion of pre-clinical courses is required by the end of the fall semester prior to the spring in which seeking admission.

Basic BSN Program Scholastic Requirements

University and College of Health Sciences policies governing scholastic requirements (e.g. major changes, probation and dismissal) apply to students enrolled in the School of Nursing. In addition to university/college requirements, the School of Nursing has further scholastic requirements for the Basic BSN Program. The scholastic requirements can be found on the nursing website: http://www.uwyo.edu/nursing (click on Programs, Basic BSN).

Curriculum

The minimum requirement to graduate with a BSN is 120 semester hours of credit. Evaluation of transfer courses is required to determine credit eligibility.

The required courses, KIN/ZOO 3115 (Human Systems Physiology), PHCY 4450 (Pathophysiology), and PHCY 4470 (Pharmacology), must be upper division (3000/4000 level). Lower division/Community College level courses do not satisfy this requirement. Transfer courses must be reviewed for acceptability.

Nursing courses are offered fall and spring semesters of the university academic calendar. Students are required to have transportation to all clinical sites. A number of clinical sites are located in Cheyenne. The capstone practicum experience during spring of the senior year requires students to live in locations away from campus.

Basic BSN Program of Study

Applicable for:

Freshman Admission to the Nursing Major (starting fall 2016 freshmen)

Non-Freshman Admission to the Nursing Major (starting spring 2018 sophomore)

Pre-Clinical Component

(Courses to be completed in first three semesters as outlined; required for the clinical component.)

FRESHMAN YEAR: Fall	**Hrs.**
First-Year Seminar (FYS)	3
ENGL 1010 (COM1)	3
MATH 1400 (Q)	3
LIFE 1010 (PN)	4
CHEM 1000 or CHEM 1020 (PN)	4
Total Hrs.	**17**

FRESHMAN YEAR: Spring	**Hrs.**
Communication 2 (COM2)	3
FCSC 1141	3
PSYC 1000 (H)	3
MICR/MOLB 2240	4
KIN/ZOO 2040	3
KIN/ZOO 2041	1
Total Hrs.	**17**

SOPHOMORE YEAR: Fall	**Hrs.**
STAT 2050 or 2070 (Q)	4
Human Culture (H)	3
U.S. & Wyoming Constitutions (V)	3
ZOO 3115	4
Total Hrs.	**14**
Pre-Clinical Component Total Hrs.	**48**

Clinical Component

(Nursing courses to begin spring 2018 are currently in development and pending approval. Monitor nursing website for updates.)

NOTE: The clinical component of the Basic BSN option requires courses to be taken in the semester sequence referenced on the program of study. All courses must be passed with a C or better each semester in order to progress to the next semester's courses.

In addition, a cumulative Nursing GPA of 3.000 based on all required courses in the program must be maintained.

BRAND

This option is for students who have a previous non-nursing baccalaureate degree, and who are seeking an accelerated option for obtaining the BSN.

Working with the Outreach School, nursing theory and supporting courses are offered using a combination of online courses, hybrid courses with periodic intensive on-campus experiences, and the Outreach School's technology. Clinical coursework is arranged at a Wyoming healthcare institution. This option is a 'summer to summer' format with a full-time schedule of courses.

Admission

Students who meet university requirements are admitted to the university in the pre-nursing component of BRAND (*declared PNBR major*). The number of students admitted to BRAND is limited, and admission is a competitive process. Applicants meeting minimum requirements are not guaranteed admission.

Criteria for admission to BRAND as well as application instructions and deadlines can be found on the nursing website, http://www.uwyo.edu/nursing *(click on Programs; BRAND; Admission Criteria/Application.*

BRAND Program Scholastic Requirements

University and College of Health Sciences policies governing scholastic requirements (e.g. major changes, probation and dismissal) apply to students enrolled in the School of Nursing. In addition to university/college requirements, the School of Nursing has further scholastic requirements for the BRAND Program. The scholastic requirements can be found on the nursing website: http://www.uwyo.edu/nursing (click on Programs, BRAND, Admission Criteria/Application).

Curriculum

The minimum requirement for the second bachelor's (SB) degree candidate to graduate with a BSN is 50 semester hours of credit. This curriculum option totals 58 credit hours.

The minimum requirement for an SB degree is 30 additional semester hours earned from UW, 12 of which must be in upper division level courses. If prior baccalaureate degree was earned through UW, the 30 credit minimum is in addition to the credits earned for previous degree. Evaluation of transfer courses is required to determine credit eligibility.

The required courses, PHCY 4450 (Pathophysiology) and PHCY 4470 (Pharmacology), must be upper division (3000/4000 level). Lower division/Community College level courses do not satisfy this requirement. Transfer courses must be reviewed for acceptability.

BRAND Program of Study

BRAND Pre-Nursing Component

Prerequisite Courses		**Hrs.**
(Courses required for admission to the nursing major component.)		
KIN/ZOO	2040	3
KIN/ZOO	2041	1
ZOO	3115	4
PHCY	4450	4
MICR/MOLB	2240	4
PSYC	1000	3
FCSC	1141	3
	Total Hrs.	**23**

(The first bachelor's degree will satisfy the UW USP general education requirements.)

Required Graduation Course	**Hrs.**
Approved US/WY Constitution course	3
(Recommend completing prior to admission, but must be completed by graduation.)	
(Students who have completed an acceptable, transferable US Constitution course will only have to complete the remaining WY Constitution component as required by UW. The WY Constitution component may be satisfied through the 1 credit exam or course.)	
Total Hrs.	**3**

BRAND Nursing Major

(58 credits)

(Nursing application and fee required.)

NOTE: *Once admitted to BRAND courses are taken in the sequence as reflected below. All courses must be passed with a C or better each semester in order to progress to the next semester's courses.*

SUMMER		**Hrs.**
NURS	3710	2
NURS	3730	2
NURS	3750	4
PHCY	4470	4
	Total Hrs.	**12**

FALL		**Hrs.**
NURS	3770	6
NURS	3771	6
NURS	3780	4
	Total Hrs.	**16**

SPRING		**Hrs.**
NURS	4710	3
NURS	4735	3
NURS	4736	3
NURS	4740	6
NURS	4741	3
	Total Hrs.	**18**

SUMMER		**Hrs.**
NURS	4775	10
NURS	4785	2
	Total Hrs.	**12**

(Note: Course requirements/expectations are subject to change. Maintain contact with FWWSON for current expectations.)

RN/BSN Completion

This option is for the associate degree or diploma in nursing level registered nurse or the Wyoming associate degree nursing student who wishes to become a baccalaureate prepared nurse. Nursing theory courses are offered online. No on-campus time is required. For students enrolled in a Wyoming community college ADN renew curriculum, please check with the community college for information to obtain BSN.

Admission

Students who meet university requirements are admitted to the university in the pre-nursing component of RN/BSN Completion *(declared PNBS major)*. Students are designated as pre-nursing until they have completed the RN/BSN Completion application process and are formally admitted into the School of Nursing. Acceptance into RN/BSN Completion is also based on evaluation of students' academic work with consideration of the RN/BSN Completion Program Scholastic Requirements.

The number of students admitted to RN/BSN Completion may be limited based on School of Nursing resources. Applicants meeting minimum requirements are not guaranteed admission to the major.

Criteria for admission to the nursing major component of RN/BSN Completion as well as application instructions and deadlines can be found on the nursing website: http://www.uwyo.edu/nursing (*click on Programs, RN/BSN Completion, Admission Requirements/Application).*

RN/BSN Completion Program Scholastic Requirements

University and College of Health Sciences policies governing scholastic requirements (e.g. major changes, probation and dismissal) apply to students enrolled in the School of Nursing. In addition to university/college requirements, the School of Nursing has further scholastic

requirements for the RN/BSN Completion Program. The scholastic requirements can be found on the nursing website: http://www.uwyo.edu/nursing (click on Programs, RN/BSN, Admission Requirements/Application).

Curriculum

The minimum requirement to graduate with a BSN is 120 semester hours of credit. It is important for students to be aware of course prerequisites for individual nursing courses and to be in regular contact with a nursing adviser. Evaluation of transfer courses is required to determine credit eligibility.

The required course, ZOO 3115 (Human Systems Physiology) may be substituted with lower division/Community College level Human Physiology courses.

The required courses, PHCY 4450 (Pathophysiology) and PHCY 4470 (Pharmacology), must be upper division (3000/4000 level). Lower division/Community College level courses do not satisfy this requirement. Transfer courses must be reviewed for acceptability.

RN/BSN Completion Program of Study

(Documentation of a current active unencumbered RN license must be on file with the School of Nursing throughout participation in the program)

Pre-Nursing Component

Required USP Courses for Admission

(The following are USP degree requirements needed for formal FWWSON admission that may be met with transfer coursework. Grades of C or better are required.)

MATH 1400	3
Approved (COM1) Course	3
Approved (COM2) Course	3
Total Hrs.	**9**

Required Prerequisite Courses for PHCY 4450

(In addition to KIN/ZOO 2040/2041 and ZOO 3115, the following courses are required prerequisites for taking PHCY 4450. They may be met with transfer coursework. Grades of C or better are required.)

LIFE 1010 (PN)	4
CHEM 1000 or 1020 (PN)	4
Total Hrs.	**8**

Core Courses

(Students are encouraged to complete these courses before taking courses in the nursing major component.)

		Hrs.
STAT	2050 or 2070 (Q)	4
PSYC	1000 (H)	3
KIN/ZOO	2040	3
KIN/ZOO	2041	1
ZOO	3115	4
Approved MICR Course		4
PHCY	4450 *(Online UW)*	4
PHCY	4470 *(Online UW)*	4
NURS	3005	1
NURS	3015	3
	Total Hrs.	**31**

Required USP Courses for Graduation

(The following are additional USP degree requirements needed for graduation that may be met with transfer coursework.)

	Hrs.
First-Year Seminar (FYS) (met with 30+ post-high school transfer hours)	3
Human Culture (H) (in addition to PSYC 1000 (H), a second approved H course is required)	3
Physical and Natural World (PN) (if not met by LIFE 1010 and CHEM 1000 or CHEM 1020)	6
U.S. & Wyoming Constitutions (V)	3
Total Hrs.	**15**

Nursing Major Component

(22 credits)

(Students must be formally admitted to the nursing major component to take these courses.)

		Hrs.
NURS	3020	3
NURS	3045	3
NURS	3630	4
NURS	4055 (COM3)	3
NURS	4145	3
NURS	4255	3
NURS	4985	3
	Total Hrs.	**22**

Escrow Courses

(Credits are automatically posted to the student's UW transcript based on completion of NURS 3630, documentation of RN licensure and transcript verifying graduation from an associate degree or diploma nursing program. These credits represent credit for nursing content learned in the associate degree or diploma in nursing program.)

		Hrs.
NURS	3440	3
NURS	3475	4
NURS	3840	3
NURS	3842	3
NURS	3844	3
NURS	3875	4
NURS	4442	4
	Total Hrs.	**24**
Minimum Hours Required for the Degree		**120**

(Residency Requirement: A minimum of 30 upper-division hours must be completed through UW.)

(Note: Course requirements/expectations are subject to change. Maintain contact with FWWSON for current expectations.)

Graduate Study

The Fay W. Whitney School of Nursing offers two graduate programs: leading to 1) a Master of Science (M.S.) degree and 2) a Doctor of Nursing Practice (D.N.P.) degree. The program option for the MS degree is Nurse Educator (NE). The program options for the DNP are Family Nurse Practitioner (FNP) and Family Psychiatric Mental Health Nurse Practitioner (PMH).

Master of Science (MS) Program

Nurse Educator (NE)

The Nurse Educator option prepares graduates to teach in undergraduate nursing education programs and in health care continuing education settings. The graduate meets the Wyoming State Board of Nursing's minimum educational requirements for teaching in a State of Wyoming approved nursing program.

MS Program Outcomes

The outcomes of the MS program are to:

1. Synthesize knowledge for the practice of evidence-based nursing and nursing education.
2. Effect change to improve health and health care in rural communities.

Admission

The MS Nurse Educator Program is currently being phased out-no new admissions will be accepted. A new Nurse Leader MS program will begin fall 2017. This program will offer a Nurse Leader or a Nurse Leader with a Nurse Educator Concentration program of study. This is an online MS program with intensive on-campus sessions for the registered nurse with a Bachelor of Science in Nursing (BSN) degree. It is a part-time, three-year program of study. This program of study is for nurses who desire to become nurse leaders at any level and in any health-related setting. The program mission is to prepare transformational learners and leaders to advance nursing education and practice, thus addressing the complexities in the 21st century healthcare system. Core curricular concepts woven throughout the curriculum include transformation, communication, interconnected global perspective, outcomes orientation, and rural population health. All students take eight core leadership courses. Students who desire to take advanced leadership courses are encouraged to apply for the Nurse Leader program of study. Students who plan to pursue a nurse-educator role are encouraged to apply for the Nurse Leader with

a Nurse Educator Concentration program of study. Application deadline is February 1, 2017. Visit the website for more information: http://www.uwyo.edu/nursing/programs/ms-nurse-leader/index.html.

Curriculum

The graduate curriculum consists of five core courses which provide a foundation of advanced knowledge for rural nursing. In addition to the core courses, a group of nurse education specialty courses are required as identified in the program of study below. Students earning the MS degree will complete a capstone project which is integrated into the teaching practicum.

Students applying for the 2015-16 school year must complete the program of study by spring 2017. The Nurse Educator program will be dicontinued in its current form and courses will not be offered after spring 2017.

NE Program of Study

(Total Credits: 36)

Core Courses

NURS	5010	3
NURS	5025	3
NURS	5027	3
NURS	5060	3
NURS	5505	3
	Total Hrs.	**15**

Educator Specialty Courses

NURS	5280	3
NURS	5285	3
NURS	5290	3
NURS	5395	3
ADED	5050	3
ITEC	5160	3
	Total Hrs.	**18**

Electives (3 credit minimum)

Select one 3-credit (minimum) 5000-level course which would supplement your need or interest (or meet your state's requirements). Courses in Adult Education & Technology are recommended.

(Note: Course requirements/expectations are subject to change. Maintain contact with FWWSON for current expectations.)

Program Specific Graduate Assistantships

Assistantships are available in the School of Nursing involving duties such as clinical teaching, online teaching, and/or research functions. Assistantships include tuition and fee reductions for all or part of the tuition costs, and a monthly stipend. Incidental students fees are usually the student's responsibility. Student Health Insurance is part of the fee structure paid for by the department. Students should contact the department at the time of application to inquire about the availability of an assistantship. All assistantship applications should be received by April 1. Notification will be made by May 1.

Doctor of Nursing Practice (DNP) Program

The DNP program is open to registered nurses with a minimum of a baccalaureate degree in nursing from a program nationally accredited by CCNE or NLNAC. The DNP program has two options: 1) Family Nurse Practitioner (FNP) and 2) Family Psychiatric Mental Health Nurse Practitioner (PMH).

DNP Program Outcomes

1. The APN Clinical Scholar embraces EBP by promoting innovation through the integration of evidence, patient preferences, and clinician expertise.
2. The APN leader articulates a vision for health care with a self awareness that allows him/her to pursue this vision with humility, passion, and dedication.

Admission

Complete application materials for the DNP Program must be received by the University of Wyoming no later than February 1 to be considered for fall admission. *(The entire DNP application process is completed online)* The applicant is responsible to make certain that UW is in receipt of all application materials/fees. Applications completed after the specified deadline will be held and reviewed for the next admission consideration. The number of students admitted is limited. Admission is a competitive process and applicants meeting minimum requirements are not guaranteed admission to the program. Admission to the university does not guarantee admission to the DNP program in the School of Nursing.

Criteria for admission as well as application instructions can be found on the nursing website: http://www.uwyo.edu/nursing *(click on Programs, DNP, Admission Criteria and Application).*

All new admits are required to come to campus for a Fall orientation. This expectation is applicable for all DNP options.

Curriculum

Curricula for the FNP and PMH options are available on the nursing website: http://www.uwyo.edu/nursing (*click on Programs, DNP*). All DNP students, regardless of specialty option will take a set of core courses. In addition to the core courses a group of specialty courses are required for each NP option. Students earning the DNP degree will complete a final scholarly project which is integrated into the FNP and PMH curricula.

Working with the Outreach School, DNP core and clinical courses will be delivered using a combination of online courses; synchronous video web-conferencing, and hybrid courses with periodic intensive on-campus experiences. Clinical placements will be arranged at health care facilities in Wyoming, north central Colorado, or southern Montana.

Family Nurse Practitioner (FNP)

The FNP option prepares advanced practice nurses to provide primary health care to diverse individuals and their families in a variety of outpatient settings, especially rural settings. Graduates are prepared to diagnose and treat common acute problems, such as infections and injuries, and common chronic illnesses, such as diabetes and hypertension. Graduates work in a variety of settings including independent nurse practitioner practices, physician offices, public health clinics, indigent clinics, emergency rooms, Indian Health Services, correctional facilities, and migrant clinics.

Family Psychiatric Mental Health Nurse Practitioner (PMH)

The PMH option prepares advanced practice nurses to provide a full range of psychiatric care. Graduates are prepared to assess, diagnose, and manage, to include prescribing psychotropic medications, for people with chronic and acute psychiatric disorders. Graduates work in a variety of settings including inpatient and outpatient facilities such as hospitals; community-based or home care centers; local, state, and federal mental health agencies; long-term care facilities; private practices; substance abuse and detoxification programs; emergency psychiatric service centers; primary care offices; correctional facilities, home health agencies; and behavioral health care companies.

Nursing (NURS)

Courses listed below, with the exception of NURS 2240, 2340, and 3250 are open only to students formally admitted into the nursing major component of the BSN Program as required of their specific option.

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1010. Reflections on Professional Nursing. 1. Introduction to various aspects of the profession of nursing with the opportunity to gain personal insight into a future nursing career. *Prerequisite:* Enrolled in Nursing FIG.

1101. First-Year Seminar. 3. [(none)◀▶FYS]

2240. Medical Terminology. 3. Introduces medical terminology. Includes word structure of medical-surgical terms, body parts and organs, body systems and commonly used medical abbreviations.

2340. Developmental Influences on Health. 3. Explores interaction between development and health. Discusses human development of physiological, psychological, cognitive, sociocultural, and spiritual systems across the lifespan. Identifies selected theories associated development over the lifespan and implications for health care. Provides foundation for more in-depth consideration of developmental factors related to health maintenance and human potential.

3005. Scholarly Approaches to Online Learning. 1. Prepares the student with the foundations of learning in an on-line format. Includes APA format, writing scholarly papers, and library skills. *Prerequisites:* Current RN license or concurrent enrollment in WY ADN education program or graduate of WY ADN education program.

3015. Introduction to Baccalaureate Nursing. 3. Introduces the role of a professional nurse with a baccalaureate degree. Conceptual foundations including nursing theories, healthcare systems, application of evidence-based practice, informatics and the components of safety, quality and leadership in nursing practice are presented. Students are prepared to move on to additional nursing coursework. *Prerequisites:* Current RN license or concurrent enrollement in WY ADN education program or graduate of WY ADN education program; NURS 3005 or concurrent enrollment.

3020. Cultural Diversity in Family Health Care. 3. [D◀▶(none)] Concepts of cultural heritage, history, diversity, health, illness, and family theories are applied to nursing assessment and care of the family as client. Contemporary issues of immigration and poverty, the effect of culture, social class, religion/spirituality, family form, family development stage and situational factors on family as client are studied. *Prerequisites:* admission into the nursing major component of the program; RN/BSN: NURS 3015 or concurrent enrollment. (Normally offered spring semester)

3045. Health Assessment in Nursing Practice. 3. Assessment of the physiological, psychosocial and sociocultural variables of the individual across the lifespan. History taking, advanced physical exam techniques and appropriate documentation of findings assist the student in identifying normal variations, potential problems of human health experiences and health promotion opportunities. *Prerequisite:* admission to nursing major component of the program; NURS 3015 or concurrent enrollment.

3125. Professional Nursing. 3. Introduction of core concepts, theory and processes essential to professional nursing. Roles and scope of practice of the professional nurse, principles of therapeutic communication, patient safety, nursing theory and process, and evidence based practice will be emphasized. *Prerequisite:* admission to the nursing major component of the program.

3140. Health Assessment. 3. Students learn to assess the physiological, psychological, sociocultural and developmental variables of individual client systems across the lifespan. Normal variations and potential problems of human health experiences are identified. Documentation skills are developed. *Prerequisite:* admission to the nursing major component of the program.

3250. Health Psychology. 3. Provides overview of growing partnership between psychology and health care, including history of psychology in health care; theoretical foundations of health and illness; intervention and research techniques; stress and high risk behaviors (e.g., substance abuse, eating behaviors, AIDS); psychology's contribution to improving outcomes and quality of life in chronic and life-threatening behaviors. Cross listed with PSYC 3250. *Prerequisite:* PSYC 1000 or consent of instructor.

3440. Adult Health I. 3. Develop clinical judgment skills by using a consistent process in identifying relevant client data, responding to that data appropriately, planning care and evaluating that care. This process will be accompanied by exploring a wide range of nursing concepts essential in caring for the adult client, through the use of case studies, interactive and/or group active learning. *Prerequisites:* admission into the nursing major component of the program; NURS 3140, 3125, PHCY 4470 or concurrent enrollment.

3475. Nursing Practicum: Adult Health I. 4. Students provide basic nursing care using the nursing process in a clinical setting with adult clients experiencing alterations in health status. The focus is on the physiological, psychological, spiritual, developmental and sociocultural dimensions of the client. The students will identify the roles of the professional nurse. Satisfactory/Unsatisfactory only. *Prerequisites:* NURS 3440 or concurrent enrollment.

3630. Health Promotion. 4. [P◀▶(none)] Learn health promotion concepts and theories, identify at risk behaviors, and design nursing interventions to promote health and prevent illness. The teaching role of the nurse is emphasized for individual and group clients across the lifespan. Students strive to effect positive changes to their own personal health and fitness. *Prerequisites:* admission into the nursing major component of the program, NURS 3015, 3020, and 3045 or concurrent enrollment.

3710. Nursing Fundamentals and Laboratory. 2. Includes concepts of basic care/comfort, technical skills, medical equipment, asepsis, medication administration, nurse/client safety, and client rights. Increased confidence and competency in critical thinking, communication skills, and the performance of motor skills. *Prerequisites:* previous bachelor's degree; admission to the BRAND track; concurrent enrollment in NURS 3750 and NURS 3730.

3715. Foundational Laboratory. 2. Using system analysis, students assess all dimensions of individual clients across life span. Concepts and demonstration of basic care/comfort; technical skills; use of equipment; asepsis/infection control; medication administration; nurse/client safety; client rights and dignity. Allows the student to gain confidence and competency in performing motor skills; critical thinking; communication; self-development. *Prerequisites:* previous Bachelor's degree; admission to BRAND; concurrent enrollment in NURS 3710; NURS 3750.

3730. Introduction to Professional Nursing. 2. Introduces students to the core concepts of professional nursing practice. Nursing process, domains of nursing practice, health policy, evidence-based practice, legal and professional standards will be assimilated into nursing practice from discussion, role playing and case studies. Contemporary nursing issues and situational factors will be examined. *Prerequisites:* previous Bachelor's degree; admitted to the BRAND nursing track.

3750. Health Assessment and Promotion. 4. Using system analysis, students assess the physiological, psychological, spiritual, socio-cultural, developmental variables of individual clients across the life span. Nursing process and evidence-based nursing practice are used to promote/protect health of clients through health promotion, risk reduction, disease prevention of the client/client systems. Process skills and professional roles are integrated. *Prerequisites:* previous bachelor's degree; admitted to BRAND program; concurrent enrollment in NURS 3710.

3770. Nursing Care in Acute and Chronic Illness. 6. Discern critical elements of professional nursing medical-surgical concepts for adults experiencing acute/chronic health alterations progressing to complex health alterations. Focuses on patient safety principles; quality initiatives; evidence-based nursing; information technology; interprofessional collaboration, communication; health promotion strategies; and critical thinking in the planning of client centered nursing care for the adult. *Prerequisites:* NURS 3750; NURS 3730; NURS 3710; PHCY 4470.

3771. Nursing Care in Acute and Chronic Illness Practicum. 6. Application of critical elements of professional nursing practice with adults experiencing acute and chronic health alterations. Focus is on incorporation of patient safety principles; quality initiatives; evidence-based nursing practice; information technology; interprofessional collaboration and communication; health promotion strategies; and critical thinking and clinical reasoning in the provision of nursing care. *Prerequisites:* concurrent enrollment in NURS 3770.

3780. Evidence-Based Practice in Nursing. 4. Prepares nursing students to engage in evidence-based practice in nursing, specifically how to search the literature and databases, ask meaningful clinical questions, find relevant evidence, critically appraise evidence, integrate best evidence with clinical expertise and patient/community values. *Prerequisites:* admission to the BRAND program, concurrent enrollment in NURS 3770.

3840. Adult Health II. 3. Progress from novice to beginner in developing critical judgment skills by applying nursing concepts and evaluating concepts on the adult client with illness. Analyze and synthesize data, develop plans of care, implement care and re-evaluate that care when necessary, through the use of case studies, interactive and/or group active learning. *Prerequisites:* NURS 3440 and 3475; NURS 3020 or concurrent enrollment.

3842. Care of the Older Adult. 3. Explores the physiological, psychological, spiritual, developmental and socio-cultural dimensions of the older adult and addresses the 30 AACN/Hartford Foundations' Recommended Baccalaureate Competencies and Curricular Guidelines for Geriatric Nursing Care. *Prerequisites:* NURS 3440 and 3475; NURS 3020 or concurrent enrollment.

3844. Mental Health and Illness. 3. Explores psychiatric illnesses and mental health concepts consistent with the roles of the professional nurse. Emphasis is on the nursing process, DSM-IV criteria, therapeutic communication, treatment modalities, legal and ethical concerns, community resources, and inter-related client needs in a variety of health care settings. *Prerequisites:* NURS 3440 and 3475; NURS 3020 or concurrent enrollment.

3875. Nursing Practicum: Adult Health II. 4. Junior nursing students are placed in clinical settings to provide patient-centered nursing care using the nursing process. The focus is on adult clients experiencing acute, chronic and/or psychiatric alterations in health. The physiological, psychological, spiritual, developmental and socio-cultural client dimensions are studied and professional nursing roles are integrated into practice. Satisfactory/Unsatisfactory only. *Prerequisites:* NURS 3840, 3842, 3844 or concurrent enrollment.

3970. Nursing Externship. 3. Allows students to obtain college credit for nursing experience gained in an approved setting. Increases application of nursing theory, knowledge of a health care agency, interpersonal working relationships, technical skills and organization of time in providing nursing care. Offered S/U only. *Prerequisites:* NURS 3840, 3842, 3844, and 3875. (Offered once a year in summer)

4055. Application of Evidence in Nursing Practice. 3. [L◀▶COM3] Prepares RN students to engage in evidence-based nursing, specifically how to ask meaningful clinical questions, find relevant evidence, critically appraise evidence, and integrate best evidence with clinical expertise and patient/community values. *Prerequisites:* QA or Q; STAT 2050 or 2070 or equivalent; COM1 and COM2; admission into the nursing major component of the program; NURS 3630 or concurrent enrollment.

4125. Evidence-Based Nursing. 3. [L,WC◀▶COM3] Prepares students to engage in evidence-based nursing, specifically how to ask meaningful clinical questions, find relevant evidence, critically appraise evidence, and integrate best evidence with clinical expertise and patient/community values. *Prerequisites:* WA and WB or COM1 and COM2; STAT 2050 or 2070 or equivalent; admission into the nursing major component of the program.

4145. Public/Community Health Nursing. 3. Students are introduced to public health nursing, the core functions and essential services of public health, and community health nursing competencies. Includes population-focused nursing, epidemiology, community assessment, and the application of the nursing process to the community as client. Students assess their communities and research health problems. *Prerequisites*: admission into the nursing major component of the program; NURS 3630 or concurrent enrollment.

4250. Leadership in Nursing. 3. The role of leader in nursing practice is developed through the integration of leadership, management, and organizational theories. Emphasis is placed on the nurse as health care provider and manager of care facilitating planned change in clients and/or environments. *Prerequisites:* NURS 4475; concurrent enrollment with NURS 4875.

4255. Nursing Leadership. 3. [WC◀▶(none)] Students study the concepts and theories of leadership, management, and organizations. Emphasis is placed on the nurse as health care provider and the development of leading, managing, decision-making, problem-solving, and writing in nursing skills. Course content includes controlling the profession, legal and ethical aspects, informatics, and professional development. *Prerequisites:* WA and WB or COM1 and COM2; admission into the nursing major component of the program; NURS 3630 or concurrent enrollment.

4440. Public Health Nursing. 4. Introduces the student to population-focused nursing and applies the nursing process to the community as client. Addresses core functions and essential services of public health. Focuses on epidemiology, community assessment, community planning and implementation, analysis of the health care system, emergency preparedness, and legal aspects of public health. *Prerequisites:* NURS 3875; NURS 4125 or concurrent enrollment.

4442. Nursing Care of Children and Families. 4. Theory course which encompasses the care of children and childbearing families including the physiological, psychological, spiritual, developmental and socio-cultural dimensions. The focus of this class is on obstetrical and pediatric nursing care. Integrates wellness and illness issues in all aspects of family care. *Prerequisites:* NURS 3875; NURS 4125 or concurrent enrollment.

4475. Nursing Practicum: Family and Public Health. 4. In this senior clinical practicum, students apply the nursing process to child-

bearing families, children and communities. The focus is on the physiological, psychological, spiritual, developmental and socio-cultural dimensions of individuals, families and populations. Students will incorporate professional nursing roles into population centered care. Satisfactory/Unsatisfactory only. *Prerequisites:* NURS 4440, 4442 or concurrent enrollment.

4710. Nursing Care of the Aging Family. 3. Utilizes nursing process to assess, promote, and protect health of aging families. Focus is on physiological, psychological, spiritual, developmental, socio-cultural dimensions of the geriatric adult, including family dynamics. Evidence-based practice guides illness and disease management; disease prevention. Expected, unexpected responses to therapies; grief, loss, end of life concepts will be incorporated. *Prerequisites:* senior standing; consent of instructor.

4735. Nursing Care of Vulnerable Populations. 3. Synthesizes past learning and cultivates independent nursing practice for vulnerable populations in acute/ community settings. Focuses on the vulnerability associated with mental health, psychiatric illnesses. Core public health functions of community assessment, essential health services, disaster preparedness, health policy development/ global health care are also emphasized to plan population-based nursing interventions. *Prerequisites:* NURS 3770 and 3780; concurrent enrollment in NURS 4736.

4736. Nursing Care of Vulnerable Populations Practicum. 3. Applies past learning and cultivates evidence-based nursing practice for vulnerable populations in acute/ community settings. Focuses on the vulnerability associated with mental health, psychiatric illnesses. Core public health functions of community assessment, essential health services, disaster preparedness, health policy development/ global health care are also emphasized to implement population-based nursing interventions. *Prerequisites:* NURS 3770; concurrent enrollment in NURS 4735.

4740. Nursing Care of the Young Family. 6. Utilizes nursing process to assess, promote, and protect the health of young families as client. Focus is human sexuality and reproduction, family planning, pregnancy stages, neonatal, pediatrics. Growth and development, health promotion, disease prevention, family dynamics are included. Evidence-based nursing guides practice to promote a healthy family and family system. *Prerequisites:* NURS 3770; 3771, and concurrent enrollment in NURS 4741.

4741. Nursing Care of the Young Family Practicum. 3. Applies and synthesizes nursing process to assess, promote, and protect the health of young families as clients. Focus is human sexuality and reproduction, family planning, pregnancy stages, neonatal, pediatrics. Growth and development, health promotion, disease prevention, family dynamics are included. Evidence-based nursing guides practice to promote a health family/family system. Offered S/U only. *Prerequisites:* NURS 3770 and 3780; and concurrent enrollment in NURS 4740.

4750. Independent Study in Nursing. 1-4 (Max. 6). Provides students with opportunity to investigate a problem in nursing care not considered in required nursing courses or to explore in more depth an area considered in one of required nursing courses. Area of study and requirements for earning credit are determined in consultation with nursing faculty member. *Prerequisite:* senior standing in nursing or consent of instructor. Offered S/U only. (Normally offered fall, spring and summer)

4775. Nursing Senior Capstone. 10. Provides opportunities to utilize and synthesize core concepts of professional nursing. Intensive clinical experience allowing students to become socialized into health care delivery system; gain in autonomy/confidence in performing skills; practice critical thinking and clinical reasoning in making ethical clinical decisions; develop leadership in providing and coordinating evidence-based nursing care. Offered S/U only. *Prerequisites:* NURS 4710; NURS 4735; NURS 4736; and concurrent enrollment in NURS 4785.

4785. Nursing Integration. 2. Focuses on the continuing integration of previously learned concepts. The student further develops the role of consumer of research and incorporates leadership and management skills as a member of the profession. *Prerequisites:* NURS 4735; NURS 4736; NURS 4710; and concurrent enrollment in NURS 4775.

4790. Special Topics in Nursing. 1-3 (Max. 8). Provides offerings in selected nursing topics on concepts, theories or practices as related to specified areas in nursing. *Prerequisites:* junior standing in nursing and consent of instructor.

4792. Cultural and International Health Care Immersion. 3. An in-depth examination of cultural influences on health care systems, which will include both classroom and in-field immersion experiences. *Prerequisites:* senior or graduate standing in student's major and instructor permission.

4875. Capstone Practicum. 12. A precepted capstone clinical course that assists students in synthesizing basic concepts of professional nursing. Learning experiences allow students to gain confidence, practice clinical reasoning and leadership skills, communicate effectively with the interprofessional team, apply ethical decision making skills and develop evidence-based practice. Satisfactory/Unsatisfactory only. *Prerequisite:* all required courses in the nursing major. (Normally offered spring semester)

4985. RN/BSN Capstone Project. 3. Synthesizes program concepts through analysis of a documented public health issue. Students will use evidence based resources, address public health competencies and analyze how the identified issue and interventions impact the health of the affected population. *Prerequisites*: Admission into the nursing major component of the program; all required courses in the nursing major; NURS 4255 or concurrent enrollment, current RN license.

5010. Health and Health Care in Rural Cultures. 3. Examines the patterns and health care of people of rural cultures for the purpose of adapting knowledge and health care models to the rural life-style and needs. Special attention is focused on development of culturally congruent self-care and professional primary care methods and on appropriate nursing roles. *Prerequisite:* admitted to UW's graduate nursing program; or consent of instructor (required form on nursing web page).

5025. Application of Theory in Advanced Nursing Practice. 3. Emphasizes critical analysis of theory and the use of theory as a base for nursing practice. Theory analysis and evaluation are used to develop theory-based practice and the interrelationships among theory, research and practice in the development of nursing knowledge are examined. *Prerequisite:* admitted to UW's graduate nursing program or consent of instructor (required form on nursing web page).

5027. Evidence-based Nursing Practice. 3. Critically analyzes the literature supporting the knowledge and implementation of evidence in health care and educational settings. Examines and critiques both quantitative and qualitative methods and their applicability to clinical problems. *Prerequisites*: Admitted to UW's graduate nursing program; NURS 5025; undergraduate statistics course.

5060. Epidemiology In Rural Health Care. 3. Presents the basic principles of epidemiology. Includes an overview of the purposes and methods of epidemiology including selected biostatics. Consideration is given to sources of epidemiological data and epidemiological strategies. Special consideration is given to the epidemiology of rural health. *Prerequisite:* baccalaureate degree.

5140. Pharmacotherapy for Primary Care Practitioners. 4. Prepares primary care practitioners in drug therapy management for a variety of client populations with an emphasis on rural practice. Cross listed with PHCY 5140. *Prerequisite:* admission into NP program; NURS 5165; or consent of NP program coordinator.

5165. Advanced Pathophysiology for Primary Care Practitioners. 4. A system-based approach is used to explore selected pathophysiological states encountered across the lifespan in primary care. The developmental physiology, etiology, pathogenesis, clinical manifestations, and physiological responses to illness and treatment regimens are examined, providing a basis for the foundation of clinical decisions. *Prerequisites:* PHCY 4450 or equivalent.

5280. Introduction to Nursing Education. 3. Introduction to the nurse faculty role in higher education. Historical perspectives of nursing education, current challenges and legal and ethical implications are discussed. Introduction to assessment and evaluation in higher education. *Prerequisite:* concurrent enrollment in NURS 5025.

5285. Teaching Methodologies and Evaluation. 3. Evidence-based teaching methodologies appropriate in both clinical and didactic courses. Development of evaluation strategies to assess student learning. *Prerequisite:* NURS 5280.

5290. Curriculum in Nursing Education. 3. Emphasis is on the process of developing curricula in a nursing education setting or healthcare setting to include assessment and evaluation of program outcomes. *Prerequisite:* NURS 5285.

5395. Practicum in Nursing Education. 3. Clinical practicum demonstrating application of the roles and responsibilities of a nurse educator in an appropriate setting with a preceptor. Satisfactory/Unsatisfactory only. *Prerequisite:* NURS 5290.

5505. Rural Nursing Leadership. 3. Examines rural nursing leadership in effecting health care system improvements through the analysis and evaluation of policy and economic, legal and ethical issues. *Prerequisites*: Completion of all required nursing major courses except for NURS 5395.

5590. Preparation for Non-Thesis Clinical Scholarship Option. 1. Facilitates students in completing the preliminary work of topic identification that is necessary to move through the Non-Thesis clinical Scholarship Option (NURS 5600). It provides the opportunity to identify and select a professional nursing problem of interest and to develop a prospectus for a clinical scholarship paper. *Prerequisites:* NURS 5010, NURS 5025, NURS 5026, and at least two of the specialty courses within the MS program completed. Students are encouraged to take this course the semester immediately preceding enrollment in NURS 5600.

5600. Non-Thesis Portfolio Seminar. 1-4 (Max. 4). Designed to facilitate documentation of the outcomes of the masters program. In an interactive forum, students apply previously learned research, theory and practice skills to the rural advanced practice nursing role. Each student will develop a portfolio to document attainment of program outcomes. *Prerequisite:* NURS 5010, 5025, and 5026; specialty courses within the MS program completed or concurrent enrollment.

5650. Non-Thesis Clinical Project. 1-4 (Max. 98). A non-thesis project involving independent student work focusing on developing, implementing and evaluating a clinical nursing project. The course content is adapted to meet the specific focus of the student. A report must be written under the direction of a member of the graduate faculty in the School of Nursing. A non-thesis committee is composed of the chair, as director, one faculty member from the School of Nursing, and a member of the graduate faculty from another discipline. *Prerequisites:* completion of NURS 5010, 5025 5026 and the majority of support courses or concurrent.

5750. Independent Advanced Study. 1-4 (Max. 8). Provides students the opportunity to analyze a problem in nursing; apply theory to clients in a clinical setting; or pursue an area of interest under the guidance of a faculty member. Requirements and evaluation are mutually established between the student and faculty member. Offered as satisfactory/unsatisfactory only.

5790. Advanced Issues in Health. 1-3 (Max. 12). Designed to provide graduate students the opportunity of pursuing advanced issues in health. *Prerequisite:* graduate status.

5800. Foundations of Integrative Advanced Practice Nursing. 3. An introduction to the core concepts and roles of advanced practice nursing, particularly the doctoral-prepared nurse practitioner. Special emphasis is given to 1) the integration of nursing and other health-related theories and models in rural nurse practitioner-delivered care and 2) professional writing in advanced practice nursing. *Prerequisite:* admission to the DNP program.

5805. Evidence-based Practice for Advanced Practice Nursing I. 3. Overview of the evidence-based practice model, including the contributions of research, patient preferences, and clinician expertise, and the theoretical frameworks that inform this expertise. Evaluating typical research designs for advanced practice nursing. *Prerequisite:* admission to the DNP program.

5810. Health Behavior Change I: Foundations. 3. Foundations of health behavior as related to individual and community systems. Special emphasis will be given to the unique aspects of rural populations. Principles of learning, theories of health behavior change, and their application to advanced nursing practice. Includes skill building for advanced Health Behavior Change courses. *Prerequisite:* admission to the DNP program.

5815. Evidence-based Practice for Advanced Practice Nursing II. 3. Students learn to develop an evaluation of clinical practice based upon critical appraisal of the existing research evidence, clinician expertise, and patient preferences. Special emphasis is placed on methods that an advanced practice nurse might use to generate and disseminate evidence from clinical practice. *Prerequisite:* NURS 5805.

5820. Health Behavior Change II: Primary Prevention and Wellness. 3. Application of theories and techniques of health behavior change and epidemiology to issues of primary prevention from the individual to the community. Development of programs for primary prevention in advanced practice nursing, including assessments, intervention development and evaluation. Examples of health issues include lifestyle interventions, stress management, substance abuse prevention. *Prerequisites:* NURS 5805 and 5810.

5824. Advanced Health Assessment and Clinical Decision-Making I. 2. Builds upon basic nursing assessment skills; includes a human cadaver lab experience to enhance learners' understanding of anatomy, physiology, and pathophysiology, progressing to didactic, hands-on practice, and check-offs of student ability to perform client interviewing and advanced physical assessment techniques. Prepares learners for the clinical decision-making required of nurse practitioners. *Prerequisite:* Successful progression in DNP program of study.

5825. Advanced Health Assessment and Clinical Decision-Making II. 4. Builds upon NURS 5824; includes advanced assessment techniques and diagnostic reasoning that lead to clinical decision-making for nurse practitioners. *Prerequisite*: Successful profession in DNP program of study.

5830. Health Behavior Change III: Secondary and Tertiary Prevntion. 3. Focuses on building NPs' skills for changing a patient's behavior, thoughts, and feelings with a focus on secondary and tertiary prevention. The goal is for students to become sufficiently skilled

in general and specific health behavior change techniques so that they can incorporate these into a holistic health care practice. *Prerequisites:* NURS 5805 and 5810.

5840. Leadership in Advanced Practice Nursing. 3. Organizational and systems leadership for improvement of health. Focuses on interrelationship among systems, ethics, policy, and change. Identifies qualities and behaviors associated with exemplary nursing leadership. Special emphasis is given to rural health care systems. *Prerequisite:* passing DNP Program Preliminary Exam.

5845. Health Communication/Informatics. 3. Emphasizes understanding, managing and using of information systems/technology to provide healthcare in rural health settings. Discussion includes the evaluation and project management of the human/technology interface with specific attention to business, ethical and legal issues encountered in interdisciplinary, collaborative settings. *Prerequisite:* passing DNP Program Preliminary Exam.

5850. Innovative Practice Models. 4. Examination of innovative health care models and their incorporation into primary care. Emphasizes the evaluation models in care delivery, quality management, and business improvement strategies. *Prerequisite:* Admission to DNP program.

5861. Practicum: Therapeutic Interventions Across the Lifespan. 3. Clinical practicum focused on beginning level therapeutic competencies in the advanced practice role of the FPMHNP. *Prerequisites:* Admission to the Doctor of Nursing Practice (DNP) Family Psychiatric Mental Health Nurse Practitioner (FPMHNP) program and successful completion of both NURS 5825 and NURS 5140.

5862. Practicum: Diagnosis and Management of the Psychiatric Client for the FPMHNP I. 5. CLinical practicum focused on beginning level diagnostic and clinical management competencies for the FPMHNP. *Prerequisite:* Admission to the Doctor of Nursing (DNP) Family Psychiatric Mengal Health Nurse Practitioner (FPMHNP) program and successful progression in the FPMHNP according to the plan of study.

5863. Practicum: Diagnosis and Management of the Psychiatric Client for the FPMHNP II. 5. Clinical practicum that allows students to continue to practice and refine competencies in the FPMHNP role with multiple and complex psychiatric populations. *Prerequisite:* Admission to the Doctor of Nursing (DNP) Family Psychiatric Mengal Health Nurse Practitioner (FPMHNP) program and successful progression in the FPMHNP according to the plan of study.

5865. Doctor of Nursing, Practice Seminar. 4 (Max. 6). Instructor and student-led discussions designed to facilitate role transition of the doctorally-prepared nurse practitioner. Seminars include topics related to integration and application of nursing and other health-related theories and models in rural nurse practitioner-delivered care. Topics will vary by year and semester as students' progress through the DNP program. *Prerequisites:* admission to the DNP program and progression through DNP plan of study.

5871. Wellness for Adults in Primary Care. 3. Provision of wellness primary care for adults across the lifespan, including primary and secondary prevention. *Prerequisite*: Admission to DNP program.

5872. Practicum for Wellness in Primary Care. 3. Clinical practicum for NURS 5871, Wellness for Adults in Primary Care. *Prerequisite*: Admission to DNP program.

5873. Primary Care for Children, Adolescents, and Families. 3. Provision of primary care for children, adolescents, and families across the lifespan, including primary and secondary prevention. *Prerequisite*: Admission to DNP program.

5874. Practicum for Primary Care for Children, Adolescents, and Families. 3. Clinical practicum for NURS 5873, Primary Care for Children, Adolescents, and Families. *Prerequisite*: Admission to DNP program.

5875. Primary Care for Acute & Chronically Ill Adults. 3. Diagnosis and management of select acute and chronic illnesses experienced by adults across the lifespan. Primary focus is on those physical and behavioral illnesses with high prevalence in rural primary care. *Prerequisite*: Admission to DNP program.

5876. Practicum for Primary Care for Acute & Chronically Ill Adults. 3. Clinical practicum for NURS 5875, Primary Care for Acute & Chronically Ill Adults I. *Prerequisite*: Admission to DNP program.

5877. Primary Care for Acute & Chronically Ill Adults II. 3. Continuation of NURS 5875. Diagnosis and management of select acute and chronic illnesses experienced by adults across the lifespan. Primary focus is on those physical and behavioral illnesses with high prevalence in rural primary care. *Prerequisite*: Admission to DNP program.

5878. Practicum for Primary Care for Acute & Chronically Ill Adults II. 3. Clinical practicum for NURS 5877, Primary Care for Acute & Chronically Ill Adults II. *Prerequisite*: Admission to DNP program.

5891. DNP Project I. 3. In collaboration with a facility, learners will examine clinically relevant data to target a practice and/or patient outcome for improvement. Learners will collect and critically appraise related evidence and develop an intervention, including an outcome evaluation plan. *Prerequisite*: Admission to DNP program.

5892. DNP Projct II. 3. Continuation of NURS 5891, DNP Clinical Research Project I. In collaboration with a facility, learners will implement the proposed clinical intervention, evaluate the outcome, and professionally disseminate the results. *Prerequisite*: Admission to DNP program.

5895. Final DNP Practicum. 5-6 (Max. 6). This final clinical experience provides learners with the opportunity to integrate previous learning from the DNP program in the provision of evidence-based health care. *Prerequisite*: Admission to DNP program.

5900. Practicum in College Teaching. 1-3 (Max. 3). Work in classroom with a major professor. Expected to give some lectures and gain classroom experience. *Prerequisite:* graduate status.

5920. Continuing Registration: On Campus. 1-2. (Max 16). *Prerequisite:* advanced degree candidacy.

5940. Continuing Registration: Off Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5960. Thesis Research. 1-12 (Max. 24). Graduate level course designed for students who are involved in research for their thesis project. Also used for students whose coursework is complete and are writing their thesis. *Prerequisite:* enrolled in a graduate degree program.

School of Pharmacy

292 Health Sciences, (307) 766-6120
FAX: (307) 766-2953
Web site: www.uwyo.edu/Pharmacy
Dean: Kem Krueger
Associate Dean of Faculty and Clinical Affairs: Tonja Woods
Associate Dean of Student Affairs: Michelle Hilaire
Associate Dean of Assessment and Academic Affairs:
Associate Dean of Research: Sreejayan Nair
Professors:
SREEJAYAN NAIR, B.S. College of Pharmaceutical Sciences, Manipol, India 1989; M.S. 1991; Ph.D. 1996; Professor of Pharmacology 2014, 2002.
JUN REN, B.S. Beijing University 1985; M.D. Peking Union Medical College 1989; Ph.D. University of Alberta 1994; Professor of Pharmacology 2005, 2002.

Associate Professors:

E. KURT DOLENCE, B.S. University of Wyoming 1983; Ph.D. University of Kentucky 1987; Associate Professor of Medicinal Chemistry 2005, 1999.

CAROL HERMANSON KOBULNICKY, B.S. University of Wisconsin 1992; M.S. 1998; Ph.D. 2002; Associate Professor of Social/Administrative Pharmacy 2009, 2002.

KEM P. KRUEGER, Pharm.D. University of Missouri-Kansas City; Ph.D. University of Arizona 1998; Associate Professor of Social and Administrative Pharmacy 2011, 2005.

TRACY D. MAHVAN, B.S. University of Colorado 1995; Pharm.D. 1998; Associate Professor of Pharmacy Practice 2006, 2000.

Assistant Professors:

TRAVIS BROWN, B.S. Washington State University 2002; Ph.D. Washington State University 2008; Assistant Professor of Pharmaceutical Science 2012.

JARED S. BUSHMAN, B.A. University of Utah 2003; M.S. University of Rochester 2006; Ph.D. 2008; Assistant Professor of Pharmaceutical Science 2014.

GUANGLONG HE, B.S. Anhui Normal University 1986; M.S. Chinese Academy of Sciences 1994; Ph.D. 1997; Assistant Professor of Medicinal Chemistry 2013.

RESHMI L. SINGH, B.S. Bombay University 1999; M.S. University of Toledo 2001; Ph.D. University of Minnesota 2005; Assistant Professor of Social and Administrative Pharmacy 2013.

LARRY B. STAUBACH, B.A. University of Dayton 1976; M.D. University of Cincinnati 1981; M.B.A Xavier University 1991; Assistant Professor of Social and Administrative Pharmacy 2012.

BASKARAN THYAGARAJAN, B.S. Madras Medical College 1994; M.S. Banaras Hindu University 1996; Ph.d. Karl Franzens University 2001; Assistant Professor of Pharmaceutics 2011.

Clinical Professor:

MICHELLE L. HILAIRE, Pharm.D. Duquesne University 2002; Clinical Professor of Pharmacy Practice 2016, 2010, 2004.

Clinical Associate Professors:

JAMIE R. HORNECKER, B.S. Texas Tech University 1999; Pharm.D. University of Wyoming 2003; Clinical Associate Professor of Pharmacy Practice 2012, 2005.

JANELLE L. KRUEGER, B.S. University of Wyoming 1992; M.S. University of Kansas 1997; Clinical Assistant Professor of Pharmacy Practice 2013, 2005.

MARY ONYSKO, B.S. Oregon State University 2003; Pharm.D. 2006; Clinical Assistant Professor 2013, 2007.

TONJA M. WOODS, Pharm.D. University of Wyoming 2002; Clinical Associate Professor of Pharmacy Practice 2009, 2003.

Clinical Assistant Professors:

LAUREN BIEHLE, Pharm.D. University of Georgia 2010; Clinical Assistant Professor 2012.

LANAE L. FOX, Pharm.D. University of Wyoming 2010: Clinical Assistant Professor 2011.

CARA HARSHBERGER, Pharm.D. University of Illinois 2005; Clinical Assistant Professor of Pharmacy Practice 2009.

BECKY S. LINN, B.A. University of Wyoming 1997; Pharm.D. 2002; Clinical Assistant Professor 2013.

ALLISON M. MANN, B.S. University of Colorado Boulder 2004; Pharm.D. University of Colorado Denver 2009; Clinical Assistant Professor of Pharmacy Practice 2014.

LEENA D. MYRAN, B.S. University of Wyoming 2000; Pharm.D. 2012; Clinical Assistant Professor of Pharmacy Practice 2014.

THANH-NGA NGUYEN, B.S. University of California Santa Barbara 2002; Pharm.D. University of Wyoming 2012; Clincal Assistant Professor 2014.

JEREMY VANDIVER, B.A. University of Colorado 2006; Pharm.D. University of Colorado 2010; Clinical Assistant Professor 2012.

Assistant Lecturer:

ANTOINETTE K. BROWN, B.S. University of Wyoming 1992; Assistant Lecturer 2013.

DAVID C. BRUCH, B.S. University of Wyoming 1998; Pharm.D. 2010; Assistant Lecturer 2012.

Drug Information Director

MELISSA L. HUNTER, B.S. University of Wyoming 2000; Pharm.D. 2004; Associate Research Scientist 2013, 2007.

Professors Emeriti:

Emery Brunett, Ph.D.
Bruce W. Culver, Ph.D.
Linda Gore Martin, Pharm.D.
Kenneth F. Nelson, Ph.D.
Robert B. Nelson, Ph.D.
Robert D. Scalley, Pharm.D.
Beverly, Sullivan, Pharm.D.
M. Glaucia Teixeira, Ph.D.
Weeranuj Yamreudeewong, Pharm.D.

Deans Emeriti:

John H. Vandel, B.S. Pharmacy
Linda Gore Martin, Pharm.D.

Vision, Mission and Values

Vision

The University of Wyoming School of Pharmacy will be nationally recognized for innovative research, teaching and pharmacy practice that develops scholar-practitioners and substantively enhances the health and well-being of the communities we serve.

Mission

The University of Wyoming School of Pharmacy exists to advance the educational and professional development of our students, generate and translate scientific findings into meaningful innovations in healthcare, and positively impact the health and well-being of the communities we serve. We accomplish this through:

- Innovative, collaborative and interdisciplinary programs that integrate reserach, teaching and pharmacy practice
- The development of scholar-practitioners capable of ethically leading and embracing change and substantively enhancing health outcomes
- Individualized, faculty-led student educational experiences

As a result, we will attract, recognize and retain the very best students, faculty and staff to drive the sucess of the School.

Statement of Values

The UW School of Pharmacy community is committed to supporting and promoting individual and collective excellence in teaching, research, service and pharmacy practice. We value responsibility, compassion, respect, and integrity in all endeavors..

Learning Outcomes

The University of Wyoming adheres to the American Association of Colleges of Pharmacy Center for Advancement of Pharmaceutical Education (CAPE) educational outcomes 2013. This multipage document (and its supplements) can be accessed at www.aacp.org. The school has outlined student/curriculum learning outcomes; these are available on the school website.

Student/Faculty Relations

The faculty and staff at the School of Pharmacy treat students as adults and expect appropriate behavior as beginning professionals. The School of Pharmacy recognizes that the profession of pharmacy demands of its

members the utmost degree of professional competence, ethical behavior, and integrity. Upon enrolling at the University of Wyoming SOP and at the start of each academic year, all students will sign a pledge acknowledging that they have received and read the current Honor Code and that they have made a personal commitment to uphold the code and abide by its principles. Similarly, the School of Pharmacy Code of Professional Expectations for faculty and staff is built on the foundation of respect for others, personal responsibility, the creation and maintenance of trust, and honesty and truthfulness. The administration, faculty, staff, students, and alumni of the School of Pharmacy at the University of Wyoming should strive to set an example of ethical leadership and professional behavior as those traits are essential for good social and business interactions.

Accreditation and Membership

In Wyoming, as in most other states, one requirement for examination and registration as a pharmacist is graduation from an accredited entry-level professional program at a school or college of pharmacy. The Accreditation Council for Pharmacy Education (ACPE), the national accrediting agency for pharmacy, accredits pharmacy degree programs.

(The Doctor of Pharmacy program at UW was most recently accredited in 2012 following an on-site evaluation by the ACPE in October 2012.) Verification of current accreditation status may be made by: a) contacting the Dean's Office, School of Pharmacy; b) connecting to www.uwyo.edu/pharmacy/; c) contacting the Accreditation Council for Pharmacy Education (135 South LaSalle Street, suite 4100 Chicago IL 60603, (312) 664-3575; csinfo@acpe-accredit.org) or d) by checking the latest Annual Directory of Accredited Professional Programs published by ACPE.

The school is a member of the American Association of Colleges of Pharmacy and adheres to its educational standards.

Preprofessional Program and Requirements

Applicants for the professional program in pharmacy must complete preprofessional requirements before they can be admitted. Usually, a minimum of four semesters (two academic years totaling 67 credit hours) is required to complete preprofessional requirements.

All preprofessional coursework must be completed by the end of the spring semester prior to matriculation in the professional program.

Graduates of fully accredited high schools may be admitted to the preprofessional program with a math placement score of 3 or an ACT math score of 23. Students transferring into the preprofessional program must have a GPA of 3.000.

For students who do not meet these requirements, it is suggested that they major in Health Sciences undeclared for their first year until they meet the requirements.

Preprofessional Program (PPCY) Required Curriculum

Suggested Course Sequence

FIRST YEAR: Fall	Hrs.
CHEM 1020	4
First-Year Seminar (FYS)	3
LIFE 1010	4
MATH 2200	4
Total Hrs.	**15**

FIRST YEAR: Spring	Hrs.
CHEM 1030	4
LIFE 2022	4
Communication I (COM1)	3
US and WY Constitutions (V)	3
Total Hrs.	**14**

SECOND YEAR: Fall	Hrs.
Communication II (COM2)	3
Human Culture (H)	3
CHEM 2420	4
STAT 2050	4
KIN/ZOO 2040	3
KIN/ZOO 2041	1
Total Hrs.	**18**

SECOND YEAR: Spring	Hrs.
MOLB 2240	5
CHEM 2440	4
Human Culture (H)	3
ZOO 3115	4
Total Hrs.	**16**

Electives

Students entering the university in the preprofessional program must fulfill University Studies Program (USP) requirements. The School of Pharmacy is committed to ensuring graduates are truly educated individuals with a broad general education as well as professional knowledge and skills. This general education component is achieved by completion of the University Studies Program requirement. Each student, both professional and preprofessional, is assigned an adviser to assist him or her in making appropriate academic choices.

Professional Doctoral Program

Admission

Admission to the professional program leading to the entry-level Pharm. D. degree is limited to 52 students per year and is highly competitive. Admission is granted by the School of Pharmacy Dean upon the advice of the School of Pharmacy Admissions Committee. Students applying to the UW School of Pharmacy must use the PharmCAS application (www.pharmcas.org) process. All materials (PCAT scores, and Letters of Recommendation) are submitted to UW using this service. The School of Pharmacy requires no supplemental application. Students granted admission to the professional program will have to pay a one-time, non-refundable, seat fee to guarantee their placement into the entering class. In addition students will be required to complete any immunizations necessary for experiential rotations. As part of a College of Health Sciences requirement students are also expected to complete and pass a background check prior to final admission to the professional program.

Students must meet, with or without accomodation, specified requirements. The School of Pharmacy's Technical Standards can be found at http://www.uwyo.edu/pharmacy/_files/documents/admin/uwsop-technical-stds-3-2013.pdf.

Program of Study

Requirements for Graduation

The degree of Doctor of Pharmacy (Pharm.D.) is granted upon satisfactory completion of 146 hours in the professional curriculum in accordance to the school's academic standards and the fulfillment of the general university requirements. Transfer students who have previous professional pharmacy credits accepted as partial completion of residence work may not earn a degree from this university for less than 30 semester hours of resident credit in the professional program of this School of Pharmacy over a minimum of two resident semesters.

Graduation with Honors

The University of Wyoming School of Pharmacy is authorized to grant honors for academic excellence. A Doctor of Pharmacy with honors designation is awarded by the University of Wyoming to students who graduate with exceptional scholarship in Pharmacy.

Exceptional scholarship in pharmacy is defined as a student who is on track to graduate with their class from the University of Wyoming School of Pharmacy and is in the top 5%

of their class based on their pharmacy GPA (as assessed at the end of the fall semester of the P4 year). The Pharmacy GPA is calculated on the basis of required professional pharmacy curriculum coursework and excludes required or selected elective hours. The honors distinction must be approved by a School of Pharmacy faculty vote.

Academic Honesty and Professional Conduct

Students admitted to the professional program are required to participate and sign the University Of Wyoming School Of Pharmacy Honor Code. Failure to sign the honor code will result in a withdrawal of admission offer or termination from the professional program.

Academic Standards for Progression and Graduation

The course of study in the School of Pharmacy (SOP) is four academic years leading to a Doctor of Pharmacy degree (PharmD). The required professional coursework is organized in a prescribed, non-negotiable, sequential manner. All students have a P-designation identifying their year in the program (P1, P2, P3, P4). Required professional courses (PHCY courses) from any national or international pharmacy programs will not be applied to the UW PharmD degree. Courses taken as S/U, including electives, are usually considered unacceptable in fulfilling program requirements. Auditing PHCY courses by students enrolled in the Doctor of Pharmacy program is also not allowed.

The academic standards herein described are expected to be followed by all students admitted to the professional program. Any violation will constitute grounds for probation or termination from the professional program and will delay progression towards advanced coursework. A leave of absence may be necessary in cases of medical or personal hardship but may adversely affect academic performance. The student may appeal sanctions related to violations of the academic standards and decisions that result in probation and termination in the program. Appeals start at the School level, followed by College and University levels, according to policy.

Academic Standards

Progression

1. Students must receive a grade of C or better in all 146 credit hours of coursework completed while in the professional program.
2. For progression, students must earn a GPA of 2.0 or better in both University coursework and professional program courses each semester and cumulatively.
3. Students must complete at least 12 hours of coursework applicable to the pharmacy degree during each semester while in good standing.
4. Required Pharmacy coursework successfully completed with a B or better prior to admission to the program is not automatically applied to the PharmD degree. The student may petition that coursework to be applied to the program, but must replace those credit hours with additional elective courses.
5. Incompletes must be completed prior to progression into the next academic semester and will halt progression in experiential coursework.
6. Students who earn a D or lower in any experiential coursework will have their rotation sequence halted.
7. A professional pharmacy program course can be repeated only once.
8. A maximum of three required courses are allowed to be repeated during the degree program.

Probation

Probation is a period of time in which the student is allowed to continue in the program under supervision. Students that do not meet academic standards and are placed on probation will have to submit a petition that includes an individualized plan of study for the next semester. This plan must be developed by the student in agreement with and signed by the academic advisor. The petition will be reviewed by the Student Affairs Committee (SAC), which will send a recommendation to the Dean for approval or denial.

9. A grade of D or lower in any course (core or elective) during the professional program constitutes failure to progress to the next semester and P-designation, and probationary status will be required for continuation in the program.

Termination

10. Failure to meet any academic standards for two semesters (not necessarily consecutive) in didactic and/or experiential coursework results in automatic termination from the professional program.
11. Failure of two experiential courses, not necessarily consecutive, results in termination from the professional program.
12. All academic requirements in the program must be completed in a maximum of 6 years.

Students shall be terminated from the program if graduation is not achieved at the end of the 6th year from their official admission date to the professional program.

Graduation

13. Graduation with a PharmD degree requires a cumulative GPA of 2.50 in coursework taken as a professional student (both total University coursework GPA and required professional program GPA) and the successful completion of 146 hours of coursework.

Elective Credits Policy

The purpose of electives at the School of Pharmacy (SOP) is to complement the pharmacy curriculum, expand knowledge within a specific pharmacy discipline and to ensure completion of the general liberal arts education of the University of Wyoming. Therefore, the following policies have been approved by the faculty for the Doctor of Pharmacy professional program (thereafter, Program).

1. As published in the University Catalog and SOP brochure students are required to complete a minimum number of electives, specific for the student's year of matriculation into the Program. This number may vary and may be modified as adjustments are made to the professional curriculum to comply with accreditation standards. Students will be made aware of this number during initial orientation into the Program and kept informed of any changes during their stay in the academic program.
2. Students must take elective courses to satisfy first the requirements of the University Studies Program (thereafter, USP) and then complete the remaining required electives credits as general elective coursework (Program-approved required number of elective hours).
3. Students are required to complete all USP requirements even if they exceed the minimum number of elective hours initially defined in their Program in order to graduate from UW.
4. All general elective coursework must be upper division (UW 3000 level or above) to ensure adequate rigor appropriate to a professional program.

a) All University of Wyoming online courses at 3000 level or above are accepted for elective credit toward the Program.

b) Transfer or online courses equivalent to UW 3000 level or above from other accredited four-year institutions may be honored as elective credits toward the Program.

5. All required hours (including electives) must be completed by students before progressing into the P4 rotation year. Students will not be allowed to progress toward the 4th year rotations if their academic records show that less than a total of 107 credits were completed and/or university studies requirements were not fulfilled.

6. When an elective course is approved through a petition, enrollment in the course must occur during the semester for which it was approved, i.e. if the student changes his/her mind, the course will have to be petitioned again to be taken during another semester.

7. Courses offered through any community colleges, including Wyoming community colleges, regardless of their level or type (online or not), are usually neither transferable nor accepted as elective credits toward the Program.

8. Students shall not take electives as Satisfactory/Unsatisfactory (S/U) credit.

9. All courses taken in the preprofessional program or to fulfill requirements in a previous degree cannot be retaken to count as elective hours in the Program.

10. Credit by exam through the Foreign Languages Dept. will not be accepted as fulfillment of elective requirements in the Program. However, it is a student's right to earn credit by exam for Wyoming History and Government, and Physical Education lecture while receiving elective credits toward the Program and fulfilling USP requirements.

For procedures and handling of all exceptions to these policies, the students should consult the SOP brochure, the student handbook, the SOP website, or check with the Manager of Pharmacy Student Services or the Associate Dean for Student Affairs.

Curriculum

The School of Pharmacy offers only the four-year curriculum leading to the Doctor of Pharmacy (Pharm.D.) degree.

In order to keep abreast with changes in pharmaceutical education, the following curriculum is subject to change or modification as required by the accrediting agency. Students should be aware that changes must be expected and they will be included in their academic program. The School of Pharmacy does not plan to change graduation requirements inadvertently, but does reserve the right to change any provisions or requirement deemed necessary at any time within the student's term of residence. Students should note that classes are usually scheduled Monday through Friday, but may include some evening and weekend coursework.

Doctor of Pharmacy Required Curriculum
Suggested Course Sequence and Courses

FIRST YEAR [PH1]: Fall		**Hrs.**
MOLB	3610	4
PHCY	6100	4
PHCY	6101	1
PHCY	6185	1
PHCY	6106	2
ZOO	4125	4
	Total Hrs.	**16**

FIRST YEAR [PH1]: Spring		**Hrs.**
PHCY	4450	4
PHCY	6102	4
PHCY	6152	3
PHCY	6354	2
PHCY	6110	3
PHCY	6170	1
PHCY	6285	1
	Total Hrs.	**18**

SECOND YEAR [PH2]: Summer		**Hrs.**
PHCY	6480	4
PHCY	6482	4
	Total Hrs.	**8**

SECOND YEAR [PH2]: Fall		**Hrs.**
PHCY	6210	3
PHCY	6245	3
PHCY	6220	3
PHCY	6230	4
PHCY	6250	3
PHCY	6280	1
	Total Hrs.	**17**

SECOND YEAR [PH2]: Spring		**Hrs.**
PHCY	6211	3
PHCY	6231	4
PHCY	6241	3
PHCY	6251	3
PHCY	6270	1
Elective		4
	Total Hrs.	**18**

THIRD YEAR [PH3]: Fall		**Hrs.**
PHCY	6312	3
PHCY	6341	3
PHCY	6350	4
PHCY	6356	1
PHYC	6357	2
Electives		4
	Total Hrs.	**17**

THIRD YEAR [PH3]: Spring		**Hrs.**
PHCY	6342	3
PHCY	6343	2
PHCY	6351	4
PHCY	6103	2
PHCY	6104	1
PHCY	6370	1
	Total Hrs.	**13**

FOURTH YEAR [PH4]: *Consists of nine experiential rotations of four credit hours each and three reflective learning weeks. Rotations are considered full-time. Students may not enroll in any other coursework concurrent with rotations. Consequently, all other coursework (107 credits) must be satisfactorily completed before enrollment in P4 coursework. Note: Students will be required to live in locations other than Laramie when enrolled in experiential rotations. Responsibility for living cost and travel arrangements associated with experimental rotations rests with the student. Students participating in all experimental activities will be required to have a vehicle or an acceptable approved alternative.*

FOURTH YEAR [PH4]: Summer, Fall, and Spring		**Hrs.**
Experiential Rotations 1		4
Experiential Rotations 2		4
Experiential Rotations 3		4
PHCY	6485	1
Experiential Rotations 4		4
Experiential Rotations 5		4
Experiential Rotations 6		4
PHCY	6485	1
Experiential Rotations 7		4
Experiential Rotations 8		4
Experiential Rotations 9		4
PHCY	6485	1
	Total Hrs.	**39**

Students must complete the following Core or Required Experiential Rotations (subject to change):

6470-Internal Medicine I
6471-Internal Medicine II
6473-Ambulatory Care I
6481-Advanced Community Pharmacy
6483-Advanced Institutional Pharmacy
Plus 4 Elective Rotations (PHCY 6465)

Graduate Study

The School of Pharmacy offers the Master of Science in Health Services Adminstration and the Master of Business Administration/ Doctor of Pharmacy (M.B.A./Pharm.D.) dual degree.

M.S. in Health Services Administration

The School of Pharmacy offers a Master of Science online degree in health services administration. This degree is geared toward new and mid-career pharmacists and other health care professionals who want to become department directors, patient safety coordinators and/or directors, regulatory compliance officers, clinical research associates, health outcomes researchers or advance practice pharmacists.

The program also benefits health care workers in fields such as management positions, pharmaceutical sales representatives, medical science liaisons and pharmacy technician educators as well as new clinical faculty at newly established pharmacy colleges.

Available nationwide -- excluding students in Massachusetts -- the master's program is delivered via a mix of online self-study and online project-based coursework.

The program can be completed in two years of part-time study. Students must travel to the UW Laramie campus for two weekend seminars during the two-year program. Graduates will be expected to complete 30 credit hours of coursework and a comprehensive final exam. Coursework will be completed over five consecutive semesters.

A prospective student should have earned at least a bachelor's degree from a regionally accredited institution. To find out more about the application process please see the following website www.uwyo.edu/pharmacy/online-ms-program or contact the Student Services Office.

M.B.A./Pharm.D. Program

The School of Pharmacy offers a M.B.A./Pharm.D. program. This dual degree program is geared toward students who have already obtained a Bachelor's degree. This multidisciplinary graduate program provides pharmacy students with a complementary business degree to start their own business or to advance into management positions during their careers. Students acquire management and leadership decision-making skills that will allow then to excel in their chosen field of practice. A dual M.B.A./Pharm.D. degree allows a student to diversifying their skill set and enhance their value to prospective employers.

The Doctor of Pharmacy/Master of Business Administration takes five years to complete - four years of Pharmacy studies and one year of M.B.A. core courses. Students spend their first year (Fall, Spring, and Summer semesters) in the M.B.A. program taking core courses and completing a summer experiential project (30 credits). The next four years will encompass the traditional Pharm. D. curriculum, including the M.B.A. Capstone course in Year 2. Students completing this program will earn a Doctor of Pharmacy degree and a Master of Business Administration degree.

Pharmacy (PHCY)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1101. First-Year Seminar. 3. [(none)◀▶FYS]

3670. Historical Foundations for the Health Care Professions. 3. Provides basis for understanding roles of health care professionals of today. Examines societal evolution of the arts and sciences that provide the foundation upon which the health sciences are established. *Prerequisite:* 3 semester hours of history or consent of instructor.

4160. Problems in Pharmacy. 1-4 (Max. 8). Original investigation on a library or laboratory problem concerned with a definite phase of work in pharmacy. *Prerequisite:* consent of instructor.

4170. Pharmacy Seminar. 1-4 (Max. 8). Students present oral reports on selected topics of pharmaceutical interest for discussion by the group. *Prerequisite:* consent of instructor.

4370 [3630]. Phytomedicinal Agents. 2. Evaluates herbal medicines from scientific viewpoint. Introduces chemistry, pharmacology, toxicology and therapeutic use of selected phytomedicinal agents. *Prerequisite:* advanced standing in nursing, professional program in pharmacy or consent of instructor.

4450. Pathophysiology. 4. Clinical concepts of dynamic disease processes in humans. Biochemical, physiological, and morphological disease mechanisms are related to symptomatology and treatment. *Prerequisites:* LIFE 1010, CHEM 1000 or 1020 and 1030, KIN/ZOO 2040, 2041, ZOO 3115 or 3120. (Normally offered spring semester)

4470 [3510]. Fundamentals of Pharmacology. 4. Studies pharmaceutical agents used for treatment, diagnosis or prevention of disease with particular emphasis on mechanisms of action, therapeutic and adverse effects. *Prerequisite:* PHCY 4450. (Normally offered fall semester)

4550. Non-Prescription Medications and Devices. 3. Develops knowledge and skills to help health care professionals function as therapeutic advisers to clients in the self-care of disease states amenable to management with non-prescription medication and/or devices. *Prerequisites:* PHCY 4450 or consent of the instructor.

4660. Health Care Law. 3. A survey of health care law for students in health care programs, law students, and other matriculated students. The subject matter will include but not be limited to the following: malpractice, licensing, informed consent, reform, reproduction and advance directives. Dual listed with PHCY 5660. *Prerequisite:* consent of instructor.

5040. The Evolution of American Health. 2. This course explores the evolution of the healthcare system in response to various needs and crises over the years. The professionalization of health care; the development of the modern hospital; the implications of computerized health information; and the empowerment of patients will be covered. *Prerequisite:* Admission into the Health Services Administration MS program.

5046. Health Services Administration Seminar. 1. An in-depth investigation of a timely issue in health services, including the regulatory, economic, patient-safety, marketing, leadership, and ethical aspects of that issue. Students will participate in separate group analysis of a presented problem, and in their presentations of their group's assessment of the problem. *Prerequisite:* Completion or concurrent enrollment in PHCY 5040.

5140. Pharmacotherapy for Primary Care. 3. Prepares primary care practitioners in drug therapy management for various client populations, emphasizing rural practice. Cross listed with NURS 5140. *Prerequisite:* B.S.N., baccalaureate in health care field or consent of instructor.

5141. Introduction to Health Economics and Outcomes. 3. This course considers the role of the range of outcomes used by clinicians and health care systems in assessing treatment modalities. The framework for conducting and assessing outcomes research will be emphasized. *Prerequisite:* Completion or concurrent enrollment in PHYC 5040.

5142. Health Economic Decision Analysis. 2. This class is designed to provide the student with the methods of comparative effectiveness research with special focus on how various

decision makers use comparative effectiveness data to assist in decision-making. *Prerequisite:* PHCY 5141.

5143. Comparative Effectiveness Research. 2. This class is designed to provide the student with the methods of comparative effectiveness research with special focus on how various decision makers use comparative effectiveness data to assist in decision-making. *Prerequisite:* PHCY 5141.

5144. Modeling in Health Economics. 2. This class is designed to provide the student with a basic understanding of the common deterministic and stochastic economic modeling techniques used in health economics. Issues surrounding data acquisition and evaluation, handling uncertainty, and factors impacting the internal and external validity of the modeling process with be addressed. *Prerequisite:* PHCY 5142.

5160. Graduate Problems Course. 1-6 (max. 12). This course allows in-depth exploration of topics in pharmaceutical sciences, at the graduate level, that are mutually agreed upon by the student and faculty. *Prerequisite:* consent of instructor.

5210. Pharmaceutical Regulatory Systems. 3. Regulatory theory and practice is used to study the authority/responsibilities of three federal agencies that are entrusted to ensure the safe, effective, and efficient medication use in the United States. The practices and procedures of the FDA, DEA, and CMS are reviewed, describing why healthcare providers should comply with regulatory principles. *Prerequisite:* Enrollment in graduate or professional program or department permission.

5240. Pharmaceutical Homicide. 3. Legal pharmaceutical products are sometimes used by healthcare professioanl criminals to kill people. This course focuses on identifying the zone of risk for people who could be harmed by pharmaceuticals, and the development of best practices to protect patients and other from the harm. *Prerequisite:* Enrollment in graduate or professional program or department permission.

5241. Introduction to Biopharmaceutical Regulatory Compliance. 3. This course considers the role of regulatory agencies that prescribe conduct in the healthcare industries and professions, focusing on the Food and Drug Administration. The functioning of other agencies, such as the federal Drug Enforcement Administration, state boards of pharmacy and state departments of health are also considered. *Prerequisite:* Completion or concurrent enrollment in PHCY 5040.

5242. The Food and Drug Admissions. 2. This course examins the regulatory climate for FDA-regulated drug and biological products. Regulatory standards are reviewed (including discovery of new therapeutic modalities, their approval, manufacturing, promotion, and distribution), and the enforcement authority of the FDA is examined (focusing on methods that promote safe and effective drug use). *Prerequisite:* PHCY 5241.

5243. The Drug Enforcement Administration. 2. This course examines the balance of health professionals and institutions working with regulators to develop programs that reflect both the best interests of individual patients and of society. Focusing on challenges of treating chronic pain, prescription drug abuse, and actions that have led to conflict between regulators and health practitioners. *Prerequisite:* PHCY 5241.

5244. State Regulations of Health Professions. 2. This course examines how state regulatory agencies assure the initial competence of practitioners, as well as their continuing competence in the years following the completion of academic training. The course also examines the factors that are applied to the regulation of health care settings, using the structure-process-outcomes typology of Donabedian. *Prerequisite:* PHCY 5241.

5541. Introduction to Biopharmaceutical Marketing and Production. 3. This course will review empirical evidence in various topic areas within the fields of biopharmaceutical marketing, sales promotion, communication, and selling effectiveness focusing on the history and structure of the biopharmaceutical product representative function and theoretical domains associated with the associated activities. *Prerequisite:* Completion or concurrent enrollment in PHCY 5040.

5550. Advanced Cardiovascular Physiology and Pharmacology. 3. An advanced study in the integration of modern cardiovascular physiology, pharmacology, biochemistry and cell biology concepts. Dual listed with PHCY 6550. *Prerequisites:* PHCY 6230 (or equivalent).

5660. Health Care Law. 3. A survey of health care law for students in health care programs, law students, and other matriculated students. Subject matter includes, but is not limited to, the following: malpractice, licensing, informed consent, reform, reproduction and advanced directives. Dual listed with PHCY 4660. *Prerequisite:* consent of instructor.

5887. Molecular Neuropharmacology. 3. Focus on the molecularly-induced functional changes within the nervous system in normal and disease states. In addition, will provide a thorough explanation of the cellular and molecular actions of drugs on synaptic transmission and discuss the neurochemical basis of behavior. *Prerequisites:* PharmD current standing and instructor's permission or NEUR 5280.

5920. Agents for Diagnostic Imaging. 2. Diagnostic Agents is currently designed as a one semester elective course with 2 credit hours. It is an introduction and survey of all diagnostic drugs used in the diagnosis and imaging of disease as approved by the US FDA for use in the United States. *Prerequisites:* PHCY 6211, PHCY 6210, PHCY 6110, CHEM 2440, MOLB 3610.

6040. Post-Graduate Career Planning. 1. This course helps student pharmacists make informed career choices. It is designed to allow students to prepare a CV and enhance a job search, interview and develop cover letter writing skills. Specific discussion topics will be largely focused on students' interest areas. *Prerequisites:* PHCY 6480 or 6482, enrollment in professional PharmD program.

6100. Dose Form Design. 4. Extensively introduces various types of dosage forms, discusses advantages and disadvantages of each. Pharmaceutical calculations are a major component of the course, as well as physicochemical principles involved in dose form stability. *Prerequisites:* CHEM 2420 and 2440.

6101. Practical Aspects of Dosage Form Design. 1. Preparation and evaluation of dosage forms is main thrust of course. Laboratory emphasizes manipulative and mathematical skills, prescription formats, packaging and storage as they apply to pharmaceuticals. *Prerequisites:* concurrent enrollment in PHCY 6100; MATH 2100.

6102. Biopharmaceutics and Pharmacokinetics. 4. [(none)◀▶COM3] Discusses biopharma-ceutic and pharmacokinetic aspects of dosage form design. Basic pharmacokinetics and biopharmaceutics are interrelated to clinical applications. Also covers classical kinetics and dissolution. *Prerequisites:* MATH 2200 and PHCY 6100.

6103. Sterile Products. 2. An introduction to the preparation and clinical application of sterile dosage forms. Emphasizes basic principles related to preparation, dispensing and administration of parenteral medications in extended care and hospital pharmacy practice. *Prerequisites:* PHCY 6100, 6101, 6105, and concurrent enrollment in PHCY 6104.

6104. Sterile Products Laboratory. 1. A hands-on training in techniques used to prepare, dispense and administer parenteral admixtures, parenteral nutrition, chemotherapy and ophthalmics. *Prerequisites:* PHCY 6100, 6101, 6105 and concurrent enrollment in PHCY 6103.

6106 [6105]. Pharmaceutical Calculations. 2. Application of basic mathematics and quantitative reasoning to pharmaceutical calculations, emphasizing calculations of doses, dosage requirements, compounding of formulations and parenterals. *Prerequisites:* MATH 1000 or 1400.

6110. Medicinal and Natural Products Chemistry I. 3. Three-semester series that studies the physicochemical, biochemical and pharmacological properties of substances of natural and synthetic origin that are used as medicinal agents. *Prerequisites:* CHEM 2440 and MOLB 3610.

6152 [6352]. Therapeutics I. 3. Emphasizes the role of the pharmacist in pharmaceutical self care, appropriate triage and referral involving prescription, non-prescription pharmaceuticals, complimentary, alternative therapies and devices in community dwelling patients with both acute and chronic self-care conditions. *Prerequisite:* enrollment in the doctor of pharmacy professional program.

6170. Introductory Pharmacy Practicum. 1. Provides an early curricular exposure to the roles and functions of pharmacists in their work environment through a shadow experience. *Prerequisites:* satisfactory completion of PHCY 6185.

6185. Seminar: Role of the Pharmacist in Health Care. 1. Provides an overview and survey of the scope of pharmacy, including educational and licensing requirements; career opportunities, pharmacy organizations and regulatory agencies, and historical evolution. *Prerequisite:* admission to the professional program.

6210. Medicinal and Natural Products Chemistry II. 3. Continuation of Medicinal and Natural Products Chemistry I. *Prerequisite:* PHCY 6110.

6211. Medicinal and Natural Products Chemistry III. 3. Continuation of Medicinal and Natural Products Chemistry II. *Prerequisite:* PHCY 6210.

6220. Pathophysiology II. 3. Continuation of PHCY 4450. Students work closely with clinical case studies. *Prerequisite:* PHCY 4450.

6230. Pharmacology I. 4. First semester of a one-year series. Studies action of chemical agents on living systems to include pharmacodynamics, toxicology, and clinical therapeutics. Concepts are emphasized through case presentations and discussion. 4.0 credit hours; lecture with separately scheduled discussion section. *Prerequisite:* PHCY 4450.

6231. Pharmacology II. 4. Second semester of a one-year series. Continuation of PHCY 6230. Lecture with separately scheduled discussion section. *Prerequisite:* PHCY 6230.

6241. Organizational and Societal Issues Within the Health Care System. 3. [(none)◀▶COM3] Surveys U.S. health care system. Discusses organization, insurance programs, legislation and health care professionals. Also discusses sociological issues pertinent to the patient and illness, the role of the pharmacist, and drugs and drug use. *Prerequisite:* enrollment in the professional program, School of Pharmacy or consent of instructor.

6242. Public Health. 3. Encompasses essentials of medical sociology, biology, chemotherapy and public health of communicable diseases; chronic diseases; and environmental health problems. *Prerequisite:* successful completion of year one of the Doctor of Pharmacy program or consent of instructor.

6245. Patient/Professional Interactions. 3. [(none)◀▶COM3] Focuses on psychosocial and communication concepts pertaining to human interactions, with application to professional practice environments and clinical counseling situations. *Prerequisite:* enrollment in the doctor of pharmacy professional program.

6250. Drug Literature Evaluation. 3. [WC,L◀▶COM3] Provides a knowledge base, techniques and skills for information retrieval, evaluation of medical and pharmaceutical practice literature, and application to specific patient problems. *Prerequisite:* STAT 2050 or equivalent; WB designated course.

6251. Therapeutics II. 3. Introduces pharmacotherapeutic principles employed in the management and monitoring of drug therapy. Assesses the impact of drug therapy on clinical laboratory parameters, metabolic states, and specific patient populations. Introduces the pharmacotherapeutic management of common disease states. *Prerequisites:* PHCY 6220, 6230.

6270. Intermediate Pharmacy Practicum. 1. [(none)◀▶COM3] An advanced exposure to the practice of pharmacy in health care environments. *Prerequisite:* satisfactory completion of PHCY 6170.

6280 [6385]. Seminar: Pharmacy Ethics. 1. Focuses on ethical issues confronting pharmacists in practice, pharmacy as a profession, the health care delivery system and society. *Prerequisite:* enrollment in the doctor of pharmacy professional program.

6281. Pharmacy Research Ethics. 1. Understanding of the ethical issues that may arise while conducting health science research and potential strategies for properly addressing these ethical issues. *Prerequisite:* concurrent or previous enrollment in PHCY 6280.

6285. Seminar: The Drug Use Process. 1. Focuses on how and why people use pharmaceuticals; people as patients; illness and wellness behavior; drug misadventuring, and appropriate intervention strategies. *Prerequisite:* PHCY 6185 or consent of instructor.

6286. Seminar: Pharmacy Practice Theories. 1. Focuses on the application of theories from the pharmaceutical and related literature with application to pharmacy practice. *Prerequisite:* PHCY 6285 or consent of the instructor.

6290. Topics in Pharmacology. 2. [W3◀▶(none)] Writing-intensive course using topics to explore the role of drugs in health care provision. *Prerequisite:* prior credit or concurrent enrollment in PHCY 6230 or 6231 or consent of instructor.

6312. Clinical Toxicology. 3. Focuses on biological and pharmacological effects of environmental, chemicals, OTC and prescription drug poisoning cases. Emphasis will be placed on the use of historical, laboratory and clinical data to diagnose and develop clinical management approaches for both acute and chronic poisoning cases. *Prerequisites:* PHCY 6230, MOLB 3610.

6341. Pharmacy Practice Law. 3. Coverage of state, federal and local laws and regulations which relate directly to the practice of pharmacy. The Wyoming Pharmacy Act serves as a model for analogous laws in other states. Case law at the federal and state levels affecting pharmacy practice is analyzed and discussed. *Prerequisite:* PH3 or consent of instructor.

6342. Pharmacy Administration. 3. Examines management of pharmaceutical services, analysis of drug distribution systems in the U.S., contemporary pharmacy practice and problems common or peculiar to all types of pharmacy services. *Prerequisite:* PH3 status.

6343. Methods for Population Health. 2. Students will be introduced to Pharmacoeconomic, Pharmacoepidemiology and Public Health concepts and methods for the purpose of applying the knowledge to provision of pharmacist-provided patient care as well as to development of health policy. *Prerequisites:* MATH 2200; PHCY 6250.

6350. Therapeutics III. 4. A study of the basic principles employed in the pharmacotherapeutic management of common disease states. Includes the pharmacist's role in monitoring drug therapy of the patient and serving as a drug consultant to the health care team. *Prerequisite:* grade of C or higher in PHCY 6251.

6351. Therapeutics IV. 4. Continuation of Therapeutics I. *Prerequisite:* grade of C or higher in PHCY 6350.

6354. Pharmacy Practice Laboratory. 2. Emphasizes the application of patient and disease state management pharmaceutical care skills by modeling patient care clinics, community practice and institutional practice.

Emphasizes patient counseling, assessment, monitoring and development of patient care plans in "mock" patient scenarios. *Prerequisites:* enrollment in the doctor of pharmacy professional program.

6356. Physical Assessment in the Evaluation of Drug Therapy. 1. Physical examination techniques and the interpretation of physical examination data. Emphasis is on a systemic approach to the physical examination, evaluation of patient data, maintaining patient charts, monitoring of patient outcomes and development of treatment plans. *Prerequisite:* P3 status or consent of instructor.

6357. Clinical Pharmacokinetics. 2. Pharmacokinetic principles of dosage regimen calculation and pharmacokinetic considerations relating to the use of various drugs. Clinical pharmacokinetics of therapeutically important drugs will be covered. *Prerequisite:* PHCY 6102.

6370. Advanced Pharmacy Experience Orientation. 1. [(none)◀▶COM3] Designed to prepare the student for 4th year experiential activities by discussion of logistics, professionalism, regulatory issues, and assessment tools. *Prerequisites:* Good standing in the P3 year or consent of instructor.

6386. Seminar: Future Trends. 1. Focuses on internal and external trends that have the potential to affect the practice of pharmacy in the future. Students are expected to discern potential trends from a variety of literature sources and project the potential effects on their future practice. *Prerequisite:* P3 status or consent of the instructor.

6465. Elective Rotation In _____. 4 (Max. 16). Advanced practice experience in a variety of pharmacy practice, patient care, health care management, and pharmaceutical industry environments. Application of knowledge and skills with active participation in direct pharmaceutical care. Development of knowledge and skills related to specialized patient populations, health care management, and pharmaceutical industry. Students will be required to move to off-campus sites to complete this course. *Prerequisite:* grade of C or higher in PHCY 6351 and 6357.

6470. Internal Medicine I. 4. Pharmacy practice experiences with acute care patient populations in community hospitals; exposure to various disease states and patient records; evaluating drug orders in medical records, assessing problems involving patient's drug therapy, monitoring drug therapy to insure effective, safe, and economical patient care, and applying drug information skills. *Prerequisite:* grade of C or higher in PHCY 6351 and PHCY 6357.

6471. Internal Medicine II. 4. [(none)◀▶COM3] Advanced practice experiences with general medicine, acute care patient populations in community hospitals. Participation in problem solving and the therapeutic decision-making process, including drug dosage regimen, application of rational therapy. *Prerequisite:* PHCY 6470.

6473. Ambulatory Pharmaceutical Care. 4. [(none)◀▶COM3] An experiential course focusing on the pharmacist as the drug expert in a multidisciplinary health care team approach to treating ambulatory patients within the philosophy of family practice. *Prerequisites:* grade of C or higher in PHCY 6351 and PHCY 6357.

6480. Introduction to Community Pharmacy Practice. 4. Four-week rotation in community pharmacy practice completed under the guidance of a licensed pharmacist. Patient care activities will include, but not be limited to, basic patient and drug therapy assessment, performing medication histories and prospective drug utilization reviews, basic patient counseling and active participation in the medication distribution process. *Prerequisites:* grade of C or higher in PHCY 6352 and 6354 and satisfactory completion of all courses within the P1 curriculum (i.e. P2 standing).

6481. Advanced Community Pharmacy. 4. An advanced practice experience in community pharmacy that involves student learning and participation in non-dispensing models of pharmaceutical care, such as pharmacist anticoagulation clinics, vaccination clinics, smoking cessation, diabetic education, chronic disease drug therapy monitoring, self-care treatment, and indigent patient care, etc. *Prerequisite:* grade of C or higher in PHCY 6351 and PHCY 6357.

6482. Introduction to Hospital Pharmacy Practice. 4. Four-week rotation in hospital pharmacy practice completed under the guidance of a licensed pharmacist. Patient-care activities will include basic drug therapy and patient assessment, prospective drug utilization reviews, participating in the hospital's medication distribution process, performing calculations, compounding preparations and understanding pharmacy's role within the health-system through interdisciplinary interactions. *Prerequisites:* grade of C or higher in PHCY 6352 and 6354 and satisfactory completion of all courses within the P1 curriculum (i.e. P2 standing).

6483. Advanced Institutional Pharmacy. 4. An advanced rotation in institutional pharmacy under the preceptorship of a licensed pharmacist. The student interacts with patients, health care professionals and allied health personnel to assure the best use of medications. *Prerequisite:* grade of C or higher in PHCY 6351 and PHCY 6357.

6485. Reflective Learning in Pharmacy. 1 (Max. 4). A debriefing class with emphasis on sharing experiences and making notice of the learning that has occurred during the community pharmacy practicums. This is a one week course to be held the week prior to starting practicums and repeated at 12 week intervals thereafter. Offered S/U Only. *Prerequisite:* PH4 status.

6550. Advanced Cardiovascular Physiology and Pharmacology. 3. An advanced study in the integration of modern cardiovascular physiology, pharmacology, biochemistry and cell biology concepts. Dual listed with PHCY 5550. *Prerequisites:* PHCY 6230 (or equivalent).

Medical Laboratory Science

Aley Hall, UW-Casper, (307) 268-2713
FAX: (307) 268-2416
Web site: www.uwyo.edu/outreach/uwcasper/prospective/degrees/mls/mls-index.html
Director: Jed M. Doxtater, MS MLS (ASCP)CM

Assistant Clinical Faculty:
JED M. DOXTATER, B.S. University of Montana 2007; M.S. University of North Dakota 2013; Assistant Clinical Faculty of Medical Laboratory Science 2015.

Assistant Lecturer
CHARLIE P. CRUZ, B.S. Lorma Colleges 1998; M.A. Don Mariano Marcos Memorial State University 2003; M.S. Lyceum of the Philippines University Batangas 2016; Ph.D. Saint Louis College 2014; Assistant Lecturer of Medical Laboratory Science 2016.

Mission and Goals

The mission of the Bachelor of Science in Medical Laboratory Science program at the University of Wyoming-Casper is to educate, train, and produce highly competent, ethical professionals who are committed to lifelong learning. Curriculum is designed to prepare students to meet current and future workplace challenges and technological advancements in the profession.

Program Goals

1. Provide education in accordance with the National Accrediting Agency for clinical Laboratory Sciences (NAACLS) standards for Medical Laboratory Science programs.

2. Provide students with adequate knowledge and background experience to successfully complete the national certification examination appropriate to their level of training.
3. Provide opportunity for students to develop skills in effective communication sufficient to serve the needs of patients, public, and other healthcare professionals.
4. Graduate well qualified Medical Laboratory Scientists who can function at a career entry level, and are prepared to meet the workforce needs of the state of Wyoming and the nation.
5. Provide students with professional role models so that they may develop and practice professional behaviors, attitudes and ethics necessary to work in, and promote the field of Medical Laboratory Science.
6. Periodically undergo program review to meet the diverse educational needs of students, accreditation standards and industry demands for qualified, skilled entry level practitioners.
7. Establish an advisory board of professionals, community partners and stakeholders for program development, evaluation and improvement.
8. Promote membership and active participation in professional societies.

Outcomes

Description of Entry Level Competencies of the Medical Laboratory Scientist

At entry level, the medical laboratory scientist will possess the entry level competencies necessary to perform the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms.

The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed or performed.

At entry level, the medical laboratory scientist will have the following basic knowledge and skills in:

- Application of safety and governmental regulations and standards as applied to clinical laboratory science;
- Principles and practices of professional conduct and the significance of continuing professional development;
- Communications sufficient to serve the needs of patients, the public and members of the health care team;
- Principles and practices of administration and supervision as applied to clinical laboratory science;
- Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services;
- Principles and practices of clinical study design, implementation and dissemination of results.

Accreditation

The UW-C MLS program is currently seeking accreditation by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Accreditation is a process of external peer review in which an agency grants public recognition to a program of study or an institution that meets established qualifications and educational standards. Participation in the accreditation process is voluntary since there is not a legal requirement for specialized programs and institutions to participate. However, when students complete a NAACLS accredited program they become eligible to sit for national certification examinations for the profession.

The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is a nonprofit organization that independently accredits medical technologist (MLS), clinical laboratory technician/medical laboratory technician (CLT/MLT), histotechnologist (HTL), histologic technician (HT), pathologists' assistant (Path Asst), diagnostic molecular scientist (DMS) and cytogenetic technology (CT), Phlebotomist (PBT), and clinical assistant (CA) educational programs.

Contract information:

National Accrediting Agency for Clinical Laboratory Sciences, 5600 North River Road, Suite 720, Rosemont, IL 60018-5119

http://www.naacls.org

Prerequisites for Admission to the MLS Professional Program

Students must meet the following minimum criteria to be considered for Admitted Major status:

- Medical Laboratory Technician (ASCP) certification or completion of an AS degree in MLT within 5 years or a B.S. degree in a related science.
- Minimum grade point average (GPA) of 2.0 on all course work transferred into the University of Wyoming at Casper from other academic institutions.
- Successful completion of the Medical Laboratory Technician BOC exam is preferred. Students that have not completed the BOC may be admitted with MLS program directors approval.
- Students admitted to the program that do not hold an A.S. in MLT or a B.S. in a related science may be required to complete the University of Wyoming University Studies program in addition to the basic requirements for the Bachelor of Science in Medical Laboratory Science degree. See the current requirements at http://www.uwyo.edu/unst/

Applying for Admission to MLS Professional Program

Students enter the MLS professional program in the fall semester of their junior year. Applications to the MLS program will be available to the student on the 1st Monday of March, and must be completed and submitted to the MLS program director by the last Friday of March.

Students are required to obtain and pay for a criminal background check. These background checks are routinely required by schools, hospitals, and other agencies that participate in the clinical practicums. The results of your criminal background check may determine if you will be admitted to the MLS program. Background check should be obtained from Viewpoint screening (https://www.viewpointscreening.com/uwyo).

After completion and submission of the program application and background check, the student must schedule an interview with the program director for an evaluation for acceptance to the MLS program. Interviews will be held between the 1st Monday of April

and the last Friday of April. It is the students' responsibility to complete and submit applications, background check, and to schedule an interview with the MLS program director by the due dates posted above.

Students will be assigned clinical practicum sites. Obtaining a clinical practice site is competitive, and students will undergo a selection process to determine, and assign clinical practicum locations. Since training opportunities cannot be guaranteed, if students are not initially placed they will be placed on an alternate list for the next available training session.

Students enrolled in the MLS program will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Liability insurance will be required for students entering their senior year coursework. Liability insurance is provided through the University of Wyoming at a cost of $13.00 / year to the student.

Health Requirements: Proof of the following health requirements to participate in students laboratories or clinical practice must be provided, this includes Health Insurance, Tuberculosis test, Hepatitis B vaccination, Measles, Mumps, Rubella and Tetanus vaccinations. To maintain ongoing enrollment in the MLS program curriculum, you may be required to meet annual requirements as specified by the clinical agency.

Essential Functions

Applicants must meet certain essential functions as defined by NAACLS. If you feel that you do not meet these essential functions, careful consideration should be made and advisement received before entering the MLS Program. Essential functions are the abilities and essential functions that a student must be able to perform to be successful in the learning experiences and completion of the program.

Observational Requirements

The MLS student must be able to:

- Observe laboratory demonstrations in which biologicals are tested for their biochemical, hematological, immunological, microbiological, and histochemical components.
- Characterize the color, odor, clarity, and viscosity of biologicals, reagents or chemical reaction products.
- Employ a clinical grade binocular microscope to discriminate among the structural and color (hue, shading, and intensity) differences of microscopic specimens.
- Read and comprehend text, numbers, and graphs displayed in print and on a video monitor.

Movement Requirements

The MLS student must be able to:

- Move freely and safely about a laboratory.
- Reach laboratory bench-tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.
- Travel to numerous clinical laboratory sites for practical experience.
- Perform moderately taxing continuous physical work, often requiring prolonged sitting, over several hours.
- Maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients.
- Control laboratory equipment (i.e., pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures.
- Use an electronic keyboard to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.
- Perform fine hand manipulations with dexterity.

Communication Requirements

The MLS student must be able to:

- Read and comprehend technical and professional materials.
- Follow verbal and written instructions in order to correctly and independently perform laboratory test procedures.
- Clearly instruct patients prior to specimen collection.
- Effectively, confidentially and sensitively converse with patients regarding laboratory tests.
- Communicate with faculty members, fellow students, staff, and other health care professionals verbally and in a recorded format.
- Independently prepare papers, prepare laboratory reports, and take paper, computer, and laboratory practical examinations.

Behavioral Requirements

The MLS student must:

- • Be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints.
- Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
- Be able to provide professional and technical services while experiencing the stresses of task-related uncertainty and a distracting environment.
- Be flexible and creative and adapt to professional and technical change.
- Recognize potentially hazardous materials, equipment, and situation and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals.
- Adapt to working with unpleasant biologicals.
- Support and promote the activities of fellow students and of health care professionals.
- Realize that the promotion of peers helps furnish a team approach to learning, task completion, problem solving and patient care.
- Be honest, compassionate, ethical and responsible.

Request for Accommodation

All students are held to the same academic and technical standards. Applicants/students with disabilities seeking accommodation must discuss their disability and accommodation needs with the University Disability Support Services (udss@uwyo.edu or (307) 766-6189; TTY: (307) 766-3073). If appropriate and upon request and registration of the applicant, a reasonable accommodation will be made consistent with University of Wyoming guidelines.

Requirements for Graduation

The program requires 120 credit hours total, with 60 credit hours obtained in the Junior/Senior years to graduate. This includes 36 credits in upper division major requirements, with a supplement of 12 upper division elective credit hours. 30 UD credits must be

taken from UW to earn a B.S. from UW. A minimum University of Wyoming GPA of 2.0 and a C (2.0 or above) in all courses is required for graduation.

Sample Four Year Plan of Study

(Lower Division Courses are available through an articulation agreement with Casper College)

FRESHMAN YEAR: Fall		Hrs.
MATH	1400 (USP Q)	4
MLTK	1500	3
MOLB	2210	4
CMAP	1505	1
SOC 1000 or ANTH 1200 (USP H)		3
	Total Hrs.	**15**

FRESHMAN YEAR:Spring		Hrs.
ENGL	1010 (USP COM1)	3
MLTK	1600	3
MLTK	1700	2
MLTK	2600	2
BIOL	1010 (USP PN)	4
GE course		3
	Total Hrs.	**17**

FRESHMAN YEAR: Summer		Hrs.
CHEM	1025 (USP PN)	3
CHEM	1028	1
MLTK	1800	3
MLTK	1970	2
	Total Hrs.	**9**

SOPHOMORE YEAR: Fall		Hrs.
ENGL	1020 (USP COM2)	3
MLTK	2500	3
MLTK	2650	2
MLTK	2700	4
POLS	1000 (USP V)	3
	Total Hrs.	**15**

SOPHOMORE YEAR: Spring		Hrs.
MLTK	2971	2
MLTK	2972	2
MLTK	2973	2
MLTK	2974	2
MLTK	2976	1
MLTK	2977	1
MLTK	2800	4
PEAC	XXXX	1
	Total Hrs.	**15**

JUNIOR YEAR: Fall		Hrs.
CHEM	1030 (USP PN)	4
CHEM	2300	4
LIFE	3050	4
LIFE	3600	4
	Total Hrs.	**16**

JUNIOR YEAR: Spring		Hrs.
STAT	2050 (USP Q)	4
MOLB	3000	3
LIFE	3500	3
MOLB	3610	4
	Total Hrs.	**14**

SENIOR YEAR: Fall		Hrs.
MLSK	4840	1
MLSK	4850	2
MLSK	4860 (USP COM3)	3
Upper Division Electives		9
	Total Hrs.	**15**

SENIOR YEAR: Spring		Hrs.
MLSK	4981	3
MLSK	4982	3
MLSK	4983	3
MLSK	4984	3
Upper Division Electives		3
	Total Hrs.	**15**
	Total	**146**

Upper Division Elective Credit Hours

12 upper division elective credit hours must be completed in the student's junior or senior year. These credits must be 3000 and above, and achieved through online outreach or on campus courses. A list of courses that are acceptable to fulfil this requirement can be made available to the student. If a course is in question, it is highly suggested to the student to contact the UW-C advising department or the MLS program director for requirement fulfillment confirmation.

Field Practicum and Laboratory Sessions

The final semester of the student's senior year is comprised of didactic material being delivered in an online hybrid manner, supplemented with on campus lab sessions at the UW-Casper campus. These lab sessions will be accompanied by an onsite practicum at a clinical affiliate, consisting of 24-48 hours of advanced clinical techniques for each advanced practicum course. It will be the students' responsibility for all travel and housing costs associated with the advanced clinical practicum courses.

Probation

Students that do not meet the minimum grade requirements stated above for MLSK course work will be placed on probation. In this period of time, students will be allowed to continue in the program under supervision, but will submit a petition which is an individualized plan of study for the next semester that is developed by the student in agreement with and signed by an academic advisor. All completed MLSK courses that fail to meet minimum grade requirements (C or 2.000 or better) must be repeated by the student. Students shall not be allowed to progress to the final semester until all courses in the previous semesters are successfully completed and a GPA of 2.000 is obtained.

Medical Laboratory Science (MLSK)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

4840. Laboratory Education Methodology. 1. This course provides an overview of education methodology and issues related to roles as educators in the clinical laboratory profession. Course topics and assignments include pedagogy, curriculum design, assessment and accreditation. Major educational responsibilities for clinical laboratory professionals relating to continuing education, competency assurance, certification and licensure will be addressed. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4850. Clinical Research Design. 2. A course in research design methods commonly used in clinical research. Emphasis is on research design, process, measurement, regulatory issues, and ethics, as used by investigators. The focus is to equip students with knowledge and skills necessary to critically examine professional literature, methodology and ethical considerations that influence research design. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4860. Laboratory Management. 3. [(none)◀▶COM3] This course introduces students to laboratory management systems, testing, reimbursement, accrediting/regulatory issues, finances, information systems, QA/QC improvement and supervisory roles in the clinical laboratory. Emphasis is on management and communication skills needed to work successfully as entry-level professionals in a health care setting. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4981. Advanced Clinical Practicum - Hematology. 3. Advanced hematology principles and techniques prepare students for practice in the clinical laboratory. Topics include leukopoiesis, FAB Leukemia classification, leukocyte dyscrasias, lymphomas, hemostasis

and coagulopathies. Laboratory will focus on abnormal smears, cytochemistry, normal and leukemic bone marrow evaluations, and coagulation mixing studies and factor assays related to clinical disease states. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4982. Advanced Clinical Practicum - Molecular. 3. Principles of molecular technology used in clinical laboratories. Laboratory experiences include cytogenetics, nucleic acid extraction, hybridization, detection, amplification, sequencing, microarrays, and in-situ hybridization. Emphasis is on the areas of the clinical laboratory that use molecular techniques related to genetics, oncology, infectious disease, and identity testing for forensic and transplant purposes. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4983. Advanced Clinical Practicum - Immunohematology. 3. Principles of immunology theory, blood group systems, genetics, and immunohematology techniques. Procedures including evaluation of blood samples, pretransfusion compatibility testing, and transfusion reactions are studied. Serologic testing and problem-solving in antibody identification and complex procedures are stressed. Laboratory emphasizes modern practices, resolution of compatibility problems and advanced antibody identification methods. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

4984. Advanced Clinical Practicum-Microbiology. 3. Focus is on underlying mechanisms of microbial pathogenesis, host responses to infectious disease and clinical diagnosis procedures. Emphasis is on detailed mechanisms of infection, pathogenesis, and major discoveries and technologies in medical microbiology. Current issues in public and global health, epidemiology, bioterrorism, biotechnology and vaccination programs will be studied. *Prerequisite:* Medical Laboratory Technician (ASCP) certification or completion of an associate of science degree in medical laboratory technician within 5 years.

Division of Social Work

Health Sciences Building, (307) 766-6112
FAX: (307) 766-6839
Web site: www.uwyo.edu/socialwork
Director: vacant

Professor:
MONA C.S. SCHATZ, B.A. Metropolitan State College 1976; M.S.W. University of Denver 1979; D.S.W. University of Pennsylvania 1985; Professor of Social Work 2006.

Associate Professors:
DONNA LEIGH BLISS, B.A. University of Maryland College Park 1989; M.S.W. University of Maryland Baltimore 1991; Ph.D. 2005; Associate Professor of Social Work 2013.
DIANE A. KEMPSON, B.A. Columbia College 1968; M.S.W. Florida State University 1970; Ph.D. University of South Carolina 1998; Associate Professor of Social Work 2010.
NEELY MAHAPATRA, B.Sc. Utkal University, India 1991; M.Sc. 1993; M.S.S.W. University of Texas-Austin 2003; Ph.D. 2008; Associate Professor of Social Work 2016.

Assistant Professors:
VALERIE THOMPSON-EBANKS, B.Sc. University of the West Indies 2002; M.S.W. 2007; Ph.D. Colorado State University 2012; Assistant Professor of Social Work 2012.
KIRSTEN HAVIG, B.A. University of Missouri 1994; M.S.W. University of South Carolina 1998; Ph.D. University of Missouri 2010; Assistant Professor of Social Work 2016.

Associate Lecturers:
CAROLYN HANEY, B.A. Chadron State College 1993; M.S.W. University of Wyoming 2000; Associate Lecturer of Social Work 2012.
HEATH WALTERS, B.A. Northwest College 1997; M.A. Global/Berean University 2000; M.S.W. Walla Walla College 2003; Ph.D. Regent University 2010; Associate Lecturere of Social Work 2016.

Social workers are uniquely qualified to help people in their own environments by looking at different aspects of their lives and cultures. We work to ensure the client's personal well-being, prevent crises, counsel individuals, support families, and strengthen communities. We make sure people get the help they need, with the best resources available.

For more than 100 years, social workers have cared for people in every stage of life. Social workers help others overcome life's most difficult challenges and manage the troubles of everyday living, including the troubles that exist due to poverty, stress, addiction, abuse, unemployment, mental illness, family change, and social violence.

Undergraduate Study

The Division of Social Work prepares students for entry-level generalist social work practice. Two locations offer the social work program: the Laramie campus and the University of Wyoming-Casper campus. Graduates receive a Bachelor of Social Work (BSW) and are prepared to work as generalist social work practitioners with individuals, groups, families, organizations, communities, and institutions to achieve more effective and efficient social functioning.

Our program is accredited by the Council on Social Work Education. The curriculum is designed to help students acquire important knowledge and skills in the areas of values and ethics, diversity, social and economic justice, human behavior and the social environment, social welfare policy and services, social work practice, and research. A competency-based curriculum prepares students to meet an "initial level" of competence in 10 core areas (CSWE, 2008). Students also select elective courses in areas such as aging, child and adolescent services, health and mental health, and disability services. The program culminates in a 450-hour supervised field practicum, which allows students to work as social workers in one of Wyoming's many human service agencies.

Social Work Major

Social work is a professional degree program. Prior to admission to the professional degree program, declared social work majors are considered Tracking Majors. Typically students apply to the professional degree program the spring semester of their sophomore year. Acceptance to Admitted Major (professional degree program) is competitive and requires an application. Please see application requirements on the Division of Social Work website. Students accepted into the professional degree program are expected to complete their degree in a timely manner. Students who have not completed social work classes for one year or more must reapply for Admitted Major and submit a plan for readiness to continue in the social work degree program. A plan may include, but is not limited to, repeating or auditing a course taken at an earlier point in the student's academic experience, completing an independent study that may provide

updated social work content for the student, demonstrating knowledge or practice skills. Readmission is not guaranteed.

Criteria for Admission as an Admitted Major

The admissions process is comptetive. Students must meet the following minimum criteria to be considered for Admitted Major status.

1. Students must earn a minimum grade point average (GPA) of 2.500 on all UW course work as well as all course work transferred into the University of Wyoming from other academic institutions.
2. Complete the following prerequisites:
   a. SOC 1000
   b. PSYC 1000
   c. POLS 1000
   d. SOWK 2000
   e. Human Biology
   (KIN/ZOO 2040 or PSYC 2080)
   f. STAT 2070
   g. ECON 1010
3. Students must earn a grade of C or higher in all SOWK prerequisite classes.
4. Students must adhere to the UW Student Code of Conduct and the NASW Code of Ethics.
5. Students cannot exhibit behavior that will impinge on the student's present or future ability to fulfill professional responsibilities as a social work professional.
6. All students seeking admission to programs in the College of Health Sciences are required to undergo a background check as specified by college policy. Criminal convictions may result in rejection of the candidate for admission to Admitted Major.
7. Students must submit an application and an application fee. (See UW Fee Book)
8. Applicants to the social work program cannot receive credit for life experience.

Requirements for Admitted Majors

Once admitted, social work students must:

1. Achieve a C or better in all social work prerequisites.
2. Achieve a C or better in all social work courses, including six hours of required social work electives.
3. Social work classes are offered and must be completed in sequential order.
4. Maintain a 2.500 or above GPA overall every semester after admittance to Admitted Major.
5. Maintain a 2.500 or above GPA overall in all social work course work every semester after admittance to Admitted Major.
6. Registration is restricted and students must meet with their advisor each semester for enrollment.
7. Complete SOWK 4990 with a satisfactory.
8. Students must adhere to the UW Student Code of Conduct and the NASW Code of Ethics.

Individuals failing to meet any of the above requirements will be reviewed by faculty and one of the following actions may be taken: remediation, probation, sanction, and/or dismissal from the program. Because many social work courses have prerequisite requirements, receiving a grade lower than a C in a social work course may prevent the individual from moving forward in the social work program.

BSW Field Practicum

All students complete a 450-hour (10 credit hours) field practicum experience in a community-based social agency or social program. Field practicum sites exist throughout the state of Wyoming and students may be placed outside Laramie. Students apply for this program the semester before their actual placement. Students must complete a Field Placement Application and meet with the Field Coordinator prior to determining a practicum site (please review Field Practicum Manual). Background checks and drug screenings may be required by some agencies even though the College of Health Sciences has received a background check during admission to the major.

For the practicum, a grade of U is interpreted as performing below expectations and will not be considered satisfactory completion of the practicum, hence of the BSW program. Based on input from the student, the field instructor, and the faculty liaison during the field evaluation, the field coordinator will determine what remediation would be required. The plan will clarify course objectives and professional skills upon which the student needs to improve. A student wishing to continue in the program would need to reapply for a field placement. Upon the field committee's approval of the request for placement, the student may then repeat the practicum experience. Consistent with University policy, the most recent grade would be the grade calculated into the GPA. The grade of U is interpreted as not meeting minimal requirements of the course; failure to complete the minimum clock hours in the field placement; failure to complete written assignments in a satisfactory manner; violation of one or more of the tenets of the NASW Code of Ethics (see Appendix B and Termination of Practicum section in the practicum manual); and/or failure to withdraw formally or to terminate the course. A student receiving an U in the practicum will be automatically dismissed from the BSW program with no opportunity to reapply or re-enter. Grades and dismissals may be appealed. (See most current BSW Student Handbook for appeal procedures.)

Requirements for Graduation

The program requires 120 credit hours to graduate. Students must have completed all social work requirements, 42 upper-division hours, maintain a 2.500 GPA overall, a 2.500 GPA in social work coursework, and have achieved a grade of C or better in all social work courses. Courses must be taken for a letter grade unless offered for S/U only. USP H and PN courses must be taken outside the major subject, but can be cross listed with the major.

Four Year Plan of Study

FRESHMAN YEAR: Fall		**Hrs.**
PSYC	1000 (H)	3
MATH	1000 (Q)	3
ENGL	1010 (COM1)	3
USP First-Year Seminar (FYS)		3
USP Human Culture (H)		3
SPAN 1010 recommended		
	Total Hrs.	**15**

FRESHMAN YEAR:Spring		**Hrs.**
LIFE	1003 (PN)	4
POLS	1000 (V)	3
Elective*		3
WMST 1080 recommended		
Elective*		3
SPAN 1020 recommended		
SOC	1000 (H)	3
	Total Hrs.	**16**

SOPHOMORE YEAR: Fall		**Hrs.**
SOWK	2000	3
STAT	2070 (Q)	4
PSYC	2080	3
USP Communication II (COM2)		3
USP Physical and Natural World (PN)		3
	Total Hrs.	**16**

SOPHOMORE YEAR: Spring	Hrs.
ECON 1010 (H)	3
Elective*	3
RELI 1000 recommended	
Elective*	3
WIND 2100 recommended	
Elective*	3
SOC 2350 recommended	
Elective*	3
PSYC 2330 recommended	
Total Hrs.	**15**

Application for Admitted Major submitted

(acceptance as Admitted Major needed to proceed in program)

JUNIOR YEAR: Fall	Hrs.
SOWK 3530	3
SOWK 3630	3
SOWK 3645	3
SOWK 4060	3
Elective*	3
FCSC 2131 recommended	
Total Hrs.	**15**

JUNIOR YEAR: Spring	Hrs.
SOWK 3540	3
SOWK 3640	3
SOWK 3650	3
SOWK 4850	3
Elective*	3
FCSC 3110 recommended	
Total Hrs.	**15**

SENIOR YEAR: Fall	Hrs.
SOWK 4560	3
SOWK 4990	5
SOWK 4991	2
SOWK Elective*	3
Elective*	3
FCSC 4112 recommended	
Total Hrs.	**16**

SENIOR YEAR: Spring	Hrs.
SOWK 4570 (COM3)	3
SOWK 4990	5
SOWK 4992	2
SOWK elective*	3
Total Hrs.	**13**
Total	**121**

*Work with your advisor to determine the best free electives for your particular career path. Consider adding a minor to your degree.

Graduate Study

The Master of Social Work (MSW) is designed to prepare graduate students for advanced level social work practice and leadership positions in rural human service organizations. The MSW program is accredited by the Council on Social Work Education. The MSW program is focused on an advanced generalist curriculum and rural social work that relies on the problem-solving method, and is based on the values, knowledge, and skills of the profession. The MSW is a full time, campus-based program that utilizes different course delivery methods to accommodate its widespread student population.

Certificate Programs

School Social Work

See Web site for details and course requirements.

Graduate Admissions Requirements

The Division of Social Work's Graduate Admissions Committee bases its decisions primarily on the evaluation of previous undergraduate and graduate work, recommendations, experience in human services (paid, volunteer, research, and internship), the applicant's personal statement, and an academic essay.

Requirements for the Standard MSW Program

- A baccalaureate degree from a nationally accredited college or university that reflects a broad liberal arts preparation. This consists of having completed at least 21 credit hours in social and behavioral sciences and 6 credit hours each in natural sciences, humanities, visual and performing arts, and quantitative reasoning;
- A human biology course, receiving a grade of C or better;
- A statistics course, receiving a grade of C or better;
- An undergraduate cumulative grade point average (GPA) of 3.000 or above on a 4-point scale;
- Applicants are encouraged to have engaged in human services or social services work as a volunteer or paid employee for at least 600 hours. These hours must be documented on a resume.

Requirements for the Advanced Standing MSW Program

- A bachelor's degree in Social Work from a Council on Social Work Education accredited social work program;
- An undergraduate social work GPA of 3.250 or above;
- An overall undergraduate GPA of 3.000 or above;
- Received a B or better and/or a Satisfactory grade in BSW Field Education Practicum;
- Applicants are encouraged to have engaged in human services or social services work as a volunteer or paid employee for at least 1000 hours (BSW internship hours can apply to this total). These hours must be documented on a resume.

*International students have special requirements for admission to UW. All are encouraged to contact the International Programs office for details before applying.

All Applicants

All applicants will be evaluated on the their:

a. Intellectual and personal qualities essential to the successful practice of social work, such as sensitivity and responsiveness in relationships, concern for the needs of others, adaptability, good judgment, creativity and integrity;
b. Commitment to social justice and equality;
c. Written and verbal communication skills;
d. Professional references and
e. The compatibility of career goals with the MSW program's advanced generalist perspective.

All applicants meeting minimum criteria will be considered for admission interviews. Admitted applicants will be required to complete a criminal background check through the College of Health Sciences.

Program Specific Degree Requirements

All students entering the MSW program do so in the summer semester of their first year, completing introductory and/or bridge courses as needed for their specific program phase. The MSW program is divided into two phases: foundation and advanced standing. The foundation year of the MSW program prepares students without a BSW degree for the advanced generalist curriculum in the second year. Students who have already obtained their

BSW degree may apply for Advanced Standing in the MSW program. These students complete only the second year courses.

Master of Social Work Field Practicum

All students, regardless of status, participate in a field practicum experience, starting in their first fall semester. New students submit an initial application for placement during their first summer of classes.

Foundation students will complete 900 hours in practicum over the course of their two years of study, 400 and 500 hours respectively. Advanced Standing students will complete 500 hours in their one year of study. All students in practicum will take a corresponding field seminar class each semester.

Grading is done as Satisfactory/Unsatisfactory. Receiving a grade of U is considered a failing grade and can result in termination from the practicum. If the practicum is terminated, the student may be offered a remediation plan to retake the required hours. This opportunity is only offered one time. The student may also be referred to the DOSW faculty for review according to the Student Academic and Professional Performance policy.

Specific information and procedures relating to all aspects of the field practicum experience can be found in the Field Practicum Manual located on the Division of Social Work's website.

Master of Social Work Plan A - Thesis

Students complete all SOWK required courses except SOWK 5755. Plan A students register for SOWK 5960 Thesis Research. Students registering for the Plan A option are required to carry out original research. Thesis proposal defense, thesis implementation, and final defense are required. Plan A students may write a monograph fully detailing their research or a publishable peer-refereed journal article, determined in consultation with the student's Research Chair and in accordance with the UW Thesis requirements.

The thesis requires a minimum of 4 credit hours, usually taken as 2 credits in the fall semester and 2 credits in the spring of advanced year.

Plan B - Practice Evaluation

Students complete all SOWK required courses except SOWK 5960. Plan B students register for SOWK 5755. Students registering for the Plan B option will conduct a practice evaluation which correlates to their advanced year practicum setting. Proposal defense and a final written paper with oral defense are required.

The practice evaluation requires a minimum of 2 credit hours, usually taken as 1 credit in the fall semester and 1 credit in the spring of the advanced year.

Social Work (SOWK)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

1001. Intellectual Community in Social Work. 3. [I,L◀▶(none)] Provides a theoretical examination of the mechanisms of oppression. Content focuses on individual, group, and societal functioning. Also provides an introduction to the profession of social work and a foundation in information literacy.

1002. Intellectual Community: The Social Work Profession. 3. [I,L◀▶(none)] Provides an introduction to the purpose and philosophy of social work. Content focuses on various roles that social workers play and the ethical dilemmas they encounter. Also provides an introduction to developing research questions in social work and the problem solving method.

1050. Topics: Social Work. 1-6. Various topics in social work.

1900. Women and Leadership. 3. [O,L◀▶(none)] Students examine theoretical, historical, and cultural aspects of leadership, values in leadership, gender differences in leadership styles, and practical applications of leadership skills through oral communication and information literacy. Individual and collaborative work is expected. Cross listed with WMST 1900. *Prerequisites:* one course in women's studies.

2000 [3000]. Introduction to Social Work. 3. Introduces social work and social welfare through an overview of the history, philosophy, ethics, values, methods, and fields of practice to generalist social work.

3530. Human Behavior and the Social Environment I. 3. Covers theories and knowledge of human bio-psycho-social-spiritual development and social interactions within a systems framework. Introduces theories of individuals and families and their development. Paradigms of culture, marginalization and oppression are examined. *Prerequisite:* admitted social work major status.

3540. Human Behavior and Social Environment II. 3. Covers theories and knowledge of human bio-psycho-social-spiritual development and social interactions within a systems framework, with a focus on groups, communities, organizations and institutions. *Prerequisites:* SOWK 3530 with a C or better and admitted social work major status.

3630. Generalist Social Work Practice I, Individual and Families. 3. Introduces generalis social work practice at all systems' levels, with focus on individuals and families. It covers the nature of social work practice, theoretical perspectives, ethics and values, engagement, assessment, intervention and evaluation processes and skills. *Prerequisite:* admitted social work major status.

3640. Generalist Social Work Practice II, Groups. 3. Focuses on group work within the generalist social work perspective, covering theoretical perspectives, ethics and values, and engagement, assessment, intervention, and evaluation skills applied to task and treatment groups. *Prerequisites:* SOWK 3630 and 3530 with a C or better and admitted major status.

3645. Ethical Social Work Practice. 3. Focuses on the ethical principles that undergird the practice of social work, addresses how to practice ethically, and explores the process of ethical decision-making. Social work practice with various client systems will be considered, as well as practice in varied settings. *Prerequisite:* admitted social work major status.

3650. Generalist Social Work Practice III; Communities and Organizations. 3. Teaches engagement, assessment, intervention and evaluation with organizations, communities and institutions within the generalist social work perspective. *Prerequisites*: SOWK 3630 with a C or better; SOWK 3540 pre or concurrent; admitted wocial work major status.

4020. Disability Studies Theory and Practice. 3.[CS◀▶(none)] Explores the interdisciplinary nature of disability studies, which investigates the embodied experience of disability as well as culturally constructed meanings and belief systems that function to stigmatize, oppress, liberate, or otherwise impact people living with illness and disability. Students will develop interdisciplinary research questions, paying particular attention to sociological realities. Dual listed with SOWK 5020; cross listed with WIND 4020. *Prerequisite:* WIND 2100 or WB or COM2.

4030. Social Work and Mental Health. 3. Presents overview of mental health services, policy, nosologies, history and interventions. Information examined in light of social work values and ethics, concern for populations-at-risk, and social and economic justice. Issues of diversity in mental health arena considered throughout. Dual listed with SOWK 5030. *Prerequisite:* advanced major in social work.

4060. Diversity and Difference in Social Work Practice. 3. [D◀▶(none)] Examines social works' roles and issues related to human diversity. Social work values and ethics

and social and economic justice are explored throughout. *Prerequisite:* admitted social work major status.

4083. Social Work and Health Care. 3. Identifies and addresses social work issues related to health, such as medical social work, public health, and health promotion. Dual listed with SOWK 5083. *Prerequisites:* SOWK 3630 and Admitted Major status; a WB or COM2 course and junior standing for non-social work majors.

4084. Professional Social Work Practice: Alcohol and Other Drugs. 3. Examines alcohol and substance abuse and social work's role in varied practice settings. Issues explored include medical considerations in alcohol abuse, social and familial challenges, as well as social work values and ethics, and concern for populations-at-risk. Dual listed with SOWK 5084. *Prerequisites:* SOWK 3630 and Admitted Major status; a WB or COM2 course and junior standing for non-social work majors.

4460. Social Welfare Policies and Issues. 3. Analyzes issues, programs, and policies in social work and social welfare. *Prerequisites:* ECON 1010 with a C or better.

4480. Introduction to Aging Services. 3. Surveys issues in aging and social work's role, status and function in the field of gerontology. *Prerequisite:* SOWK 2000 or consent of instructor.

4550 [3550]. Child Welfare Services. 3. Examines issues of child and family welfare in the context of national, state, and local policy and practice. Social and economic justice are examined as they relate to interventions with children and families. Dual listed with SOWK 5550. *Prerequisites:* SOWK 2000; SOWK 3530.

4560. Social Work Research. 3. Introduces social work research and practice evaluation. Prepares students to use research in practice. *Prerequisites:* STAT 2050 or 2070 with a grade of C or better and admitted social work major status.

4570. Research-Informed Practice. 3. [WC◀▶COM3] Learn about and engage in methods of research applicable to their social work practice. Competence in methods such as single system design and program evaluation will be assessed in this course. *Prerequisites:* SOWK 4560 with a C or better and admitted social work major status.

4780. Seminar: _____. 1-9 (Max. 15). Consideration of special topics of current interest in social work. May be repeated for a maximum of 15 hours credit when the seminar topic is different. *Prerequisite:* advanced major status; or consent of instructor and junior standing for non-social work majors.

4850. Human Rights, Social Justice and Social Policy. 3. Examines human rights, social welfare policy, and social, political and economic justice, as well as systems that oppress and create injustice, both in the US and internationally. A focus of the course will be the analysis of social welfare policy as it affects social justice issues. *Prerequisites:* SOWK 4060, ECON 1010, and admitted social work major status.

4881. International Social Welfare and Social Development. 3. [G◀▶(none)] Examines the basic framework of social welfare analysis and social development programming in the international arena, employing a multinational comparative analysis approach to explore the wide array of responses to social need across the globe. Students employ multinational comparative analyses to an area of social concern. Dual listed with SOWK 5881; cross listed with INST 4881. *Prerequisite:* POLS 1000; ECON 1010 recommended.

4960. Service-Learning in Psychology. 3. Experience applied aspects of psychology in real world settings through volunteering. Recent research and other materials preparing students for their service will be discussed in class. After the volunteering experience, the students will prepare an academic paper integrating their practical experience with research and theory learned in class. Cross listed with PSYC 4960. *Prerequisites*: PSYC 1000 and consent of instructor required in advance.

4980. Independent Study. 1-3 (Max. 6). Consideration of topics of current social work interest in consultation with a member of the faculty. *Prerequisites:* advanced major status and consent of instructor.

4990. Social Work Practicum. 5-10 (Max. 10). Represents the culmination of preparation for entry level generalist social work practice. Supervised practice in the knowledge, values and skills learned in the classroom. Offered S/U only. *Prerequisites*: SOWK 3640, 3650 and application to the field program.

4991. Social Work Competency Assessment I. 2. Develops and supports student integration of classroom and field practicum experiences in a final demonstration of competencies for the beginning practitioner. *Prerequisite:* concurrent enrollment in SOWK 4990.

4992. BSW Field Seminar II. 2. Develops and supports student integration of classroom and field practicum experiences in a final demonstration of competencies for the beginning practitioner. *Prerequisite:* taken concurrently with SOWK 4990.

5000. Topics: Social Work. 1-3 (Max. 15). Various advanced topics in social work will be presented. May be repeated for a maximum of 15 hours when offered for different topics. *Prerequisite:* bachelor's degree; 18 hours in socio/behavioral sciences preferred.

5020. Disability Studies Theory and Practice. 3. Explores the interdisciplinary nature of disability studies, which investigates the embodied experience of disability as well as culturally constructed meanings and belief systems that function to stigmatize, oppress, liberate, or otherwise impact people living with illness and disability. Students will develop interdisciplinary research questions, paying particular attention to sociological realities. Dual listed with SOWK 4020; cross listed with WIND 5020. *Prerequisite:* WIND 2100 or WB or COM2.

5030. Social Work and Mental Health. 3. Explores mental health services, policies, neologies, history, and interventions. Information examined in light of social work values and ethics, concerns for populations-at-risk, and social and economic justice. Issues of diversity in mental health areas considered throughout. Dual listed with SOWK 4030. *Prerequisite:* graduate standing.

5081. Assessment and The DSM. 3. Through a psychiatric social work lens students will become familiar with the process of conducting a diagnostic interview, writing psychiatric assessment including a mental status exam and formulating a diagnosis using the Diagnostic and Statistical Manual of Mental Disorders. This course assumes some knowledge of mental health and mental illness. *Prerequisite:* graduate standing.

5082. Women and Mental Health in Context. 3. Examines the context of women's lives that contribute to actual or perceived emotional vulnerability and psychiatric diagnoses. Priority will be shifted from individual clinical pathology of women to a perspective of societal and patriarchal oppression. *Prerequisites:* graduate standing or consent of instructor.

5083. Social Work and Health Care. 3. Identifies and addresses social work issues related to health, such as medical social work, public health, and health promotion. Dual listed with SOWK 4083. *Prerequisites:* SOWK 3630 and Admitted Major status; a WB or COM2 course and junior standing for non-social work majors.

5084. Professional Social Work Practice: Alcohol and Other Drugs. 3. Examines alcohol and substance abuse and social work's role in varied practice settings. Issues explored include medical considerations in alcohol abuse, social and familial challenges, as well as social work values and ethics, and concern for

populations-at-risk. Dual listed with SOWK 4084. *Prerequisites:* SOWK 3630 and Admitted Major status; a WB or COM2 course and junior standing for non-social work majors.

5100. Principles and Philosophy of Social Work. 3. Explores the history, traditions, ethics, purpose, philosophy, and knowledge base of the social work profession. Introduces the 10 core competencies of the MSW curriculum and the generalist social work perspective in rural settings using the problem-solving approach. *Prerequisite:* admission into the MSW program.

5110. Social Policy Analysis. 3. Explores the theory, history, structure and impact of social welfare policy on individuals, families, groups, organizations and communities. Particular attention paid to the analysis and development of policy, programs, and services related to social issues on a national, state, and local level. *Prerequisite:* admission into the MSW program and have either completed SOWK 5100 or take SOWK 5110 and 5100 concurrently.

5115. Social Welfare Policy: Human Rights and Social Justice. 3. Examines human rights and social and economic justice from a social work perspective, as well as systems that oppress and create injustice in the US and internationally. *Prerequisite:* admission to the MSW program.

5120. MSW Foundation Field Seminar I. 1. Develops and supports student integration of classroom and field practicum experiences in a seminar-style discussion of core competencies for the foundation year MSW student. *Prerequisites:* taken concurrently with SOWK 5450.

5121. MSW Foundation Field Seminar II. 1. Develops and supports student integration of classroom and field practicum experiences in the 2nd seminar-style discussion course of core competence for the foundation year MSW student. *Prerequisite:* taken concurrently with SOWK 5460.

5200. Human Behavior and the Social Environment I. 3. A theoretical examination of human behavior and the social environment, focusing on individuals, families and small groups in the context of human life cycle development. Emphasizes issues of human diversity and social and economic justice in the context of the environment. *Prerequisites:* admission into the MSW program and either completion of SOWK 5100 or concurrent enrollment.

5210. Human Behavior and the Social Environment II. 3. A theoretical examination of human behavior in the social environment, focusing on groups, communities, organizations and institutions. Emphasizes issues of human diversity and social economic justice. *Prerequisite:* SOWK 5200.

5300. Generalist Social Work Practice I. 3. Applies social work skills, values, and knowledge to a range of human service settings in a rural state. Emphasis is on generalist practice models and skills within a systems' framework. Covers engagement, assessment, intervention, and evaluation across all system levels. Addresses ethics and diversity throughout the course. *Prerequisite:* admission into the MSW program.

5310. Generalist Social Work Practice II. 3. Applies social work skills, values and knowledge to the engagement, assessment, intervention and evaluation processes with groups, organizations and communities. Emphasis on ethics and diversity in practice. *Prerequisite:* admission into the MSW program; must have completed SOWK 5300.

5400. Social Work Generalist Research Methods. 3. Covers design, implementation and interpretation of research in social work practice settings. Presents methods of program evaluation and practice research at all system levels using both quantitative and qualitative research methodologies. *Prerequisite:* admission into the MSW program.

5450. Field Practicum I. 3. Provides the opportunity for students to learn through experience the skills of entry-level generalist social work practice. The course consists of supervised practice, in a community service agency, of social work knowledge, values and skills learned in the classroom. *Prerequisites:* Students must have completed, or be concurrently enrolled in, SOWK 5100, SOWK 5200, SOWK 5300, and SOWK 5400.

5460. Field Practicum II. 5-10 (Max. 10). Provides the opportunity for students to learn through experience the skills of entry-level generalist social work practice. The course consists of supervised practice, in a community service agency, of social work knowledge, values and skills learned in the classroom. *Prerequisite:* SOWK 5450.

5495. Social Work Research and Analysis. 3. Designed for MSW advanced standing students to address research methods and analysis in the context of the generalist problem-solving approach. *Prerequisite:* admission to the MSW advanced standing program; concurrent enrollment in SOWK 5499.

5499. Social Work Generalist Practice. 3. Designed to prepare newly admitted advanced standing MSW students for advanced generalist practice. Covers, in depth, theoretical perspectives practice with individuals and families, ethics and values, the social work relationship, the problem-solving process, interviewing, intervention, and evaluation skills. Focus on evidence-based practice models will be addressed. *Prerequisite:* admission to the MSW advanced standing program; concurrent enrollment in SOWK 5495.

5500. Advanced Policy: Advocacy and Social Action. 3. Advanced generalist course builds on foundation and advanced year courses to prepare students to conduct comparative and advanced policy analysis and develop practice/advocacy components. Emphasis is given to policy practice issues that address economic and social justice, diversity, populations at risk, and ethics and values. *Prerequisite:* SOWK 5310 and SOWK 5115 or advanced standing.

5550. Child Welfare Services. 3. Examines issues of child and family welfare in the context of national, state, and local policy and practice. Social and economic justice are examined as they relate to interventions with children and families. Dual listed with SOWK 4550. *Prerequisites:* admission to advanced standing or SOWK 5100 and 5200.

5600. Advanced Generalist Practice. 3. Teaches advanced generalist practice theories and skills for work with individuals and families in the context of their environment. Engagement, assessment, intervention and evaluation skills will be assessed. Issues of ethics, rural practice, and diversity are addressed throughout the course. *Prerequisites:* SOWK 5300 and SOWK 5310 or advanced standing.

5700. Advanced Theories and Practice with Children and Families. 3. Advanced application of generalist problem-solving theories and skills in working with individuals and families in the context of their environment. Issues of ethics, rural practice, diversity, and evaluation of practice addressed throughout the course. *Prerequisite:* SOWK 5300 and SOWK 5310 or advanced standing.

5705. Social Work Leadership in Supervision and Administration. 3. Focuses on theories and skills for leadership, supervision, and administration in social work practice. Study of models and best practices, as well as skill development, will move the student toward leadership in supervision and management competence. *Prerequisites:* SOWK 5300 and SOWK 5310 or advanced standing.

5720. Advanced Generalist Practice: Community and Rural Practice. 3. Emphasizes advanced understanding and application of models of rural community practice for promotion of well-being of client systems. Rurality and diversity/difference will be highlighted in this course. Models taught are appropriate to the social work profession, based on ethical considerations, cultural competency, and the strengths perspective. *Prerequisite:* SOWK 5310 or advanced standing.

5750. Applied Research: Practice Evaluation. 3. Focuses on the theory and use of small system design and program evaluation to evaluate one's social work practice. *Prerequisite:* SOWK 5400.

5755. Practice Evaluation. 1-12 (Max. 12). Students complete a non-thesis Plan B practice evaluation paper of quality, working with a committee structure. Must complete a minimum of two credit hours of 5755. *Prerequisite:* SOWK 5750; or advanced standing status and SOWK 5495; and instructor approval.

5795. Rural Health Care Seminar. 3. Examines social work and rural health and medical care for individuals, families and larger systems through policy, practice, and research. Includes a focus on the health and health care of older adults. *Prerequisites:* consent of instructor, graduate standing, participation in WYO HealthCARE Inter-disciplinary rural training grant.

5800. Advanced Seminar in Social Work. 1-3 (Max. 15). Consideration of special topics of current interest in social work. May be repeated for a maximum of 15 hours when the topic of the seminar is different. *Prerequisite:* graduate standing and consent of instructor.

5810. Working with Children and Families in the Schools. 3. Enhances knowledge, skills, and values of the generalist social worker serving children of diverse backgrounds and their families in the school and its environment, preparing the social worker for a leadership role in a rural school setting. *Prerequisite:* graduate standing.

5820. School Social Work. 1. Builds on the skills developed in SOWK 5810, advancing the knowledge, values and skills necessary for school social work. Students integrate observations of school social work settings with theory and practice, and personal evaluation, within this seminar. Public school law and policy are highlighted. *Prerequisite:* successful completion of SOWK 5810.

5850. Advanced Field Practicum. 5-10 (Max. 10). Provides advanced generalist social work practice experience in a community human service organization. Emphasizes core competencies and advanced generalist practice behaviors in social work ethics, values, theory, skills, practice and research in relation to social work with individuals, groups, families, organizations, and communities. *Prerequisites:* SOWK 5460 or Advanced Standing.

5855. MSW Advanced Field Seminar I. 1. Supports the advanced year MSW student's experience in the field practicum. This course is taken concurrently with SOWK 5850. *Prerequisite:* taken concurrently with SOWK 5850.

5856. MSW Advanced Field Seminar II. 1-8 (Max. 8). Supports the advanced year MSW student's experience in the field practicum. To be taken concurrently with SOWK 5850, spring semester. *Prerequisite:* SOWK 5855; concurrent with SOWK 5850.

5881. International Social Welfare and Social Development. 3. Examines the basic framework of social welfare analysis and social development programming in the international arena, employing a multinational comparative analysis approach to explore the wide array of responses to social need across the globe. Students employ multinational comparative analyses to an area of social concern. Dual listed with SOWK 4881; cross listed with INST 5881. *Prerequisite:* POLS 1000; ECON 1010 recommended.

5887. American Indian Health. 3. Studies the impact of federal policy on development of American Indian Health programs and the current status of American Indian health. *Prerequisite:* admission into graduate program.

5920. Continuing Registration: On Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5940. Continuing Registration: Off Campus. 1-2 (Max. 16). *Prerequisite:* advanced degree candidacy.

5950. Interpersonal Counseling. 3.

5959. Enrichment Studies. 1-3 (Max. 99). Designed to provide an enrichment experience in a variety of topics. Note: credit in this course may not be included in a graduate program of study for degree purposes.

5960. Thesis Research. 1-12 (Max. 24). Graduate level course designed for students who are involved in research for their thesis project. Also used for students whose coursework is complete and are writing their thesis. *Prerequisite:* enrollment in a graduate degree program and instructor approval.

5975. Independent Study. 1-3 (Max. 3). In-depth exploration of a social work topic in consultation with a social work faculty member. *Prerequisite:* consent of instructor.

Wyoming Institute for Disabilities (WIND)

147 Health Sciences Buliding,
(307) 766-2761
FAX: (307) 766-2763
Web site: www.uwyo.edu/wind
Executive Director: Sandra Root-Elledge, M.A.

Associate Professor:
MICHELLE JARMAN, B.A. University of California at Berkeley 1989; M.A. Northern Michigan University 2000; Ph.D. University of Illinois at Chicago 2006; Associate Professor of Disability Studies 2014, 2007.

Academic Professional/Associate Lecturer:
SANDRA ROOT-ELLEDGE, B.S. University of Wyoming 2001; M.A. 2003; Associate Lecturer 2009, 2004.

Academic Professional/Assistant Lecturers:
CANYON HARDESTY, B.S. University of Wyoming 2004; M.S. 2007; M.S. Creighton University 2011; Assistant Lecturer 2013.
ALISON QUAGGIN HARKIN, B.A. Univeristy of Toronto 1981; M.A. Athabasca University 2010; Assistant Lecturer 2014.
DARCY REGAN, B.S. Marquette University 2003; M.A. University of Northern Colorado 2007; Assistant Lecturer 2012.
MICHAEL WILLIAMSON, B.S. Augustana College 2000; M.S. California State University Northridge 2012; Assistant Lecturer 2016.

The Wyoming Institute for Disabilities (WIND) is part of a national network of University Centers of Excellence in Developmental Disabilities Education, Research and Service (UCEDD). These centers provide a broad array of interdisciplinary academic, clinical, and research experiences of people with disabilities—particularly developmental disabilities. A wide variety of disciplines contribute to the study of disabilities.

WIND offers a Disability Studies Minor which investigates broad questions about the nature, meanings, and consequences of disability from interrelated social, historical, cultural, and political perspectives. The undergraduate minor in Disability Studies examines disability issues from multiple lenses, and draws specifically from social sciences, humanities, and health sciences.

Disability Studies has an ethical commitment to place the interests and voices of people with disabilities at the center of our curricula and training activities. The Disability Studies Minor balances theoretical exploration with practical application, and provides students with a vibrant understanding of disability history, cultural representation, policy concerns, and current debates. Ultimately, students in the minor will work closely with people with disabilities, and gain the skills and perspectives to participate in unique disability research and advocacy.

Disability Studies Minor Requirements:

18 credit hours total

All students in the minor are required to complete three WIND core courses, one WIND elective, and two external electives related to disability issues. External electives should be selected in consultation with a Disability Studies faculty adviser.

Required Core Courses: 9 credits

WIND 2100 Introduction to Disability Studies
WIND 4020 Disability Studies Theory & Practice
WIND 4500 Disability Studies Practicum

WIND Elective: 3 credits selected from other WIND offerings

WIND 2700 Gender and Disability
WIND 2500 Topics in Disability Studies
WIND 3160Disability Civil Rights Movements
WIND 4050 Independent Study
WIND 4990 Topics in Disability Studies

External Electives: 6 credits selected from other UW course offerings related to disability studies

(3 credits lower division & 3 credits upper division recommended)

Since an overarching goal of the minor is to examine disability as an essential element of human diversity, this program is designed to complement majors from across the university. For more detailed information, visit our website: www.uwyo.edu/wind/academic_opp/. You may also contact faculty adviser Michelle Jarman at mjarman@uwyo.edu or by phone at 766-5060, or visit the WIND office located in the Health Sciences Building, room 147.

Disability Studies Program Goals:

These goals are conceptualized as the ultimate "ends" we hope to achieve in educating students and trainees in disability studies.

1. Promote full social integration by providing knowledge, awareness, and experience of inclusion and integration of people with disabilities as a foundational ethical principle of disability studies.
2. Position disability as a social justice issue by exposing students to historical and contemporary disability issues and providing learning opportunities to identify, articulate, and address inequities and injustices affecting the lives of people with disabilities.
3. Position disability as diversity by providing theoretical and practical contexts for thinking about disability as a component of human diversity, and providing students with tools to critically examine social and cultural constructions of disability.

Wyoming Institute for Disabilities (WIND)

USP Codes are listed in brackets by the 2003 USP code followed by the 2015 USP code (e.g. [QB◀▶Q]).

2100. Introduction to Disability Studies. 3. [CH,D◀▶H] Provides students with an overview of the disability studies field. Students gain introductory knowledge about the disability studies perspective by examining the work of scholars from many academic backgrounds, which will facilitate students' understanding of the interdisciplinary nature of disability studies.

2500. Topics in ____. 1-3 (max. 6). Provides students with the opportunity to gain introductory knowledge by examining various topics in the field of Disability Studies. *Prerequisite:* Consent of instructor.

2700. Gender and Disability. 3. [D◀▶H] Disability studies draws upon critical theory to investigate disability as a discursive construction. Investigates how intersecting conceptions of disability and gender have shaped cultural meanings and the social positioning of specific groups, especially women with disabilities. Topics include non-normative embodiment, issues of representation and subjectivity, and the politics of health, sexuality, and care. Cross listed with WMST 2700.

3160. Disability Civil Rights Movements. 3. Provides a review and analysis of the various disability rights movements in the US and the social changes that have resulted from these movements. This includes the early roots following the French Revolution through the protest era of the 1960s to present efforts to change federal policy. *Prerequisites:* past or concurrent enrollment in SOC 100 or WIND 2100.

4020. Disability Studies Theory and Practice. 3. [CS◀▶(none)] Explores the interdisciplinary nature of disability studies, which investigates the embodied experience of disability as well as culturally constructed meanings and belief systems that function to stigmatize, oppress, liberate, or otherwise impact people living with illness and disability. Students will develop interdisciplinary research questions, paying particular attention to sociological realities. Dual listed with WIND 5020; cross listed with SOWK 4020. *Prerequisite:* WIND 2100 or WB or COM2.

4050. Independent Study. 1-3 (Max. 6). Offers the advanced student the opportunity to pursue a topic of interest with the direction of an instructor in disability studies. Dual listed with WIND 5050. *Prerequisite:* WB and consent of instructor.

4500. Practicum. 3. Provides students practical experience in the field of Disability. Typically taken during a student's final semester in the Disability Studies Minor. *Prerequisites:* completion of WIND 2100, and WIND elective, WIND 4020 (or concurrent enrollment).

4990. Topics in _____. 1-3 (max. 12). Provides upper division/graduate students with the opportunity for critical analysis and in-depth examination of various topics in the field of Disability Studies. *Prerequisite:* consent of instructor.

5020. Disability Studies Theory and Practice. 3. Explores the interdisciplinary nature of disability studies, which investigates the embodied experience of disability as well as culturally constructed meanings and belief systems that function to stigmatize, oppress, liberate, or otherwise impact people living with illness and disability. Students will develop interdisciplinary research questions, paying particular attention to sociological realities. Dual listed with WIND 4020; cross listed with SOWK 5020. *Prerequisite:* WIND 2100 or WB or COM2.

5050. Independent Study. 1-3 (Max. 6). Offers the advanced student the opportunity to pursue a topic of interest with the direction of an instructor in disability studies. Dual listed with WIND 4050. *Prerequisite:* WB and consent of instructor.

5100. Topics. 1-3 (Max. 12). Provides graduate students with the opportunity for critical analysis and in-depth examination of various topics in the field of Disability Studies. *Prerequisite:* upper division/graduate standing.

5990. Graduate School Internship. 1-12 (Max. 24). Provides graduate students with the opportunity for internship experiences within the disability field.