

SCHOOL OF NURSING AND HEALTH SCIENCES

SCHOOL OF NURSING AND HEALTH SCIENCES PROGRAMS

Sheryl Steadman, Dean

The Westminster School of Nursing and Health Sciences offers programs leading to the Baccalaureate degrees in nursing and public health. The undergraduate program prepares students to begin practice as professional nurse generalists. The program is designed for all qualified applicants including high school graduates, transfer students, and those with degrees in other fields.

Baccalaureate Nursing Program

The Baccalaureate Nursing program prepares students to practice as professional nurses. The curriculum provides students with various clinical experiences to enhance their learning. Graduates of the program are prepared to take the national licensing examination for Registered Nurses (NCLEX-RN). In addition, our program is fully accredited by the Commission of Collegiate Nursing Education.

Human Performance and Wellness

Human Performance and Wellness courses include traditional strength training classes to innovative mind-body-spirit offerings in outdoor recreation and leadership opportunities, nutrition, athletic training, and preparation for certification in personal training and group exercise.

Baccalaureate Public Health Program

The Westminster University Bachelor of Science in Public Health Degree addresses the health of communities and populations through instruction, service, and research. The program builds on Westminster University's excellence in liberal arts education by emphasizing the role the humanities and social sciences have in public health and then adding a commitment to scientific and quantitative sciences in addressing public health problems. Students who graduate with this degree will be able to utilize these tools to address public health issues with a scientifically sound methodology while remaining holistic, community-oriented and globally conscious.

Faculty

Daniel Bunker, Associate Professor
John Contreras, Professor
Roland "Sam" Davis, Associate Professor
Elizabeth Hanna, Assistant Professor
Elizabeth Harald, Associate Professor
Susanne Jones, Professor
Han Kim, Professor
Ronda Lucey, Professor
Heidi Mason, Assistant Professor
Colette McAfee, Associate Professor
Cristina Monge, Professor
Ted Morris, Professor
Rachel Myrer, Assistant Professor
Curtis Nielson, Assistant Professor
Shauna Olsen, Assistant Professor
Rebecca Sanderson, Associate Professor
Manardie "Art" Shimata, Associate Professor
Sheryl Steadman, Dean and Associate Professor
Juanita Takeno, Assistant Professor
Cindy Thomas, Assistant Professor
Chris Torman, Associate Professor
Heidi Waldrop, Assistant Professor
Jon Worthen, Associate Professor

NURSING

Sheryl Steadman, Dean
Sam Davis, Program Director

Philosophy Statement

The faculty at Westminster University's School of Nursing provide learning opportunities for individuals preparing to engage in the art and science of nursing. We are committed to excellence in teaching through the creation of an active learning environment that promotes inclusiveness and respect for diversity. We feel a deep sense of responsibility to build a foundation of knowledge and develop skills that will prepare students to function as nurse leaders in a variety of settings.

Mission

The undergraduate nursing program prepares professional nurse generalists whose liberal arts and professional education enables them to meet the health care needs of society and to continue life-long personal and professional development. To this end, the program offers a major in nursing leading to a Bachelor of Science degree. The program is designed to serve the learning needs of undergraduate students. Graduates of the program are eligible to take the national licensing examination for Registered Nurses (NCLEX-RN).

Liberal education, theory, research, and practice are integrated through collaborative learning methods. We encourage professionalism, teamwork, and interprofessional collaboration. We foster leadership development and strive to develop learners with knowledge of healthcare delivery systems and healthcare policy on a local and global level.

The nursing curriculum is designed with the premise that to be excellent nurses and leaders, students must be able to think critically, communicate effectively, understand their own values, and be sensitive to the values of others. In addition, they must have a thorough understanding of theoretical, empirical, and practical knowledge related to the profession of nursing. A professional nurse maintains the standards and ethics of the profession, advocates for patients, reflects on practice for improvement, and utilizes innovation and technology in the delivery of care.

Program Goal and Outcomes

The program goal is to prepare professional nurses who are competent, caring, ethical, critical thinkers, scholarly, and effective communicators. Graduates of the undergraduate nursing program will be able to:

1. Synthesize the theoretical and empirical knowledge from nursing, life, physical, and social sciences, and the arts and humanities in professional nursing practice.
2. Integrate critical thinking, innovation, and creativity to provide evidence-based nursing care for individuals, families, groups, and communities in a variety of health care settings.
3. Incorporate professional values and life-long learning in the practice of professional nursing.
4. Influence the quality of nursing, patient safety, and health care within practice settings through the use of leadership skills, management concepts, and knowledge of the political system.
5. Collaborate with healthcare professionals in disease prevention and promotion of health for diverse individuals and populations throughout the life cycle.
6. Integrate inter-professional communication and collaboration to improve patient health outcomes.
7. Examine health care policy, finance, and delivery systems that meet the health needs of society.
8. Integrate informatics and technology in the delivery of quality nursing care.

Program Requirements

The undergraduate nursing program may be completed in four years. Requirements include courses in the humanities, life sciences, behavioral and physical sciences, and nursing. Refer to the plan of study listed below. Additional information about university policies is provided in the sections "Degree Requirements" and "Academic Policies and Procedures."

Students must meet the university-wide graduation requirements in addition to the nursing major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Admission and Prerequisite Support Course Requirements

Students who qualify for admission to Westminster University can declare a pre-nursing major. Students apply to progress into nursing courses after completing the prerequisite support classes with a grade of C or higher, including the WCore courses, SOC 105 or SOC 253. Students must have a minimum cumulative grade point of 2.80 and a minimum prerequisite grade point of 3.00 on a 4.0 scale in order to be considered for admission to the undergraduate nursing program. Please refer to the chart for a complete list of required prerequisite coursework.

Application to the Nursing Program

In addition to applying for admission to Westminster University, students apply to progress into the Nursing Program. Acceptance is determined by the Nursing Program's Admission and Progression Committee, which bases its decisions on the following criteria:

1. Completion of all prerequisite courses with a grade of C or better and an average GPA of 3.00 or higher; cumulative GPA from all institutions of higher education attended of at least 2.80.
2. Three completed recommendations from professionals indicating qualifications for success in nursing. Examples include employers, professors, instructors, or teachers.
3. Previous enrollment at Westminster University is beneficial to qualified applicants.
4. A typed letter of intent, which includes statements related to the candidate's skills and qualifications. The letter is evaluated on content, clarity, motivation to become a nurse, spelling, and grammar.
5. Applicants to the nursing program are required to obtain necessary screening through a certified background check company as a part of their application. The applicant will agree to release all of the required information from the certified background check company to the dean of the nursing program. The certified background check must be free of criminal arrest history. **If there is a criminal arrest history, arrests must be expunged prior to submission of the application. Drug test results must be negative.**
6. Ability to meet the State of Utah Student Nurse Physical Demands Policy requirements.

Additional Requirements Upon Acceptance

1. Upon admission to the program, health information will be required by the School of Nursing and Health Sciences. Students will be responsible for providing updated health information on a yearly basis. Students must have personal health insurance and maintain health insurance throughout the nursing program. Proof of health insurance will be required prior to the beginning of classes each semester.
2. Proof of completion of a course or licensure as a CNA, LPN/PN, MA, or EMT is required prior to starting nursing courses. Proof of certification must be provided. If an admitted student is not currently licensed, he/she will need to complete a course. Admitted students have until the following dates to provide proof of requirement completion:

For Fall semester start: August 1

For Spring semester start: December 1

1. Malpractice insurance will be purchased by Westminster University and billed to each student. Nursing students are required to have their own health insurance throughout the duration of the nursing program. Students are required to submit proof of coverage on a yearly basis.

2. Students need to be able to provide their own transportation to clinical sites and may need to travel long distances. Students are expected to wear the official nursing student uniform to clinical experiences and to abide by the dress standard as outlined in the Undergraduate Nursing Student Handbook.
3. For successful continued progression through the program, nursing students are required to maintain high academic, ethical, and professional standards. Elaboration of progression policies are published in the Undergraduate Nursing Student Handbook.

Clinical rotations are scheduled during day, evening, or weekend shifts. Clinical rotation schedules are non-negotiable: students are expected to accept clinical rotations as assigned, regardless of personal scheduling conflicts (work, child care, etc.).

Students need to be aware that they are:

1. Required to notify the School of Nursing and Health Sciences of any changes in background check status within 24 hours of an incident.
2. Expected to be honest, responsible, dependable, civil, and mature. Nursing faculty expect students will be responsible for maintaining integrity in meeting course requirements. Students are responsible for managing their own learning and making appropriate contacts when unable to meet clinical assignments; they are also responsible for honesty in all written work and exams. The university policy on academic honesty outlines actions that may be taken in the event of dishonesty.
3. Required to achieve a grade of C or higher in nursing coursework. To achieve the minimum grade requirement, a grade of C or higher is necessary in both theoretical and clinical components of each nursing course. Grades of C- and below are not acceptable.

Nursing Program Grading System

A (4.0) 95–100%

A- (3.7) 90–94%

B+ (3.3) 87–89%

B (3.0) 83–86%

B- (2.7) 80–82%

C+ (2.3) 78–79%

C (2.0) 75–77%

C- (1.7) 73–74%

D+ (1.3) 69–72%

D (1.0) 65–68%

D- (0.7) 62–64%

F (0.0) 61 & below

4. Must have a cumulative grade point average of 2.3 or higher in nursing coursework in order to graduate.

Progression in the Program

The student must:

1. Maintain a minimum cumulative grade point average of 2.3.
2. Receive a grade of C or higher in all nursing courses. A grade of C- or lower in two nursing courses will result in dismissal from the program. Cumulative test/quiz scores must average 75% or higher, or the student will not be able to progress. If a student does not achieve a 75% or higher, the course grade will reflect only the average test/quiz scores achieved by the end of the course.
3. Complete prerequisite courses before enrolling in a course.
4. In identified nursing courses, a math test must be passed at 85% or higher to progress in the nursing program. Once students have been admitted into the nursing program, they have 8 semesters in which to complete the program.
5. Maintain negative drug screens and have no criminal arrests.
6. Complete required end of course and program exit exams.
7. Participate in a required NCLEX review course.

Course Probation and Program Dismissal Policy

A student may receive a clinical/classroom warning of probationary status at any time during a clinical or classroom experience if the faculty determines that the student's performance is unsatisfactory. The written warning will outline what the student must do to meet the course requirements. Students who have been placed on course probation will be formally evaluated at the end of that course. Any probationary status will be documented in the student record.

A student will be dismissed from the nursing program for any of the following reasons:

1. Violations of the academic honesty policy.
2. Violation of the American Nurses Association "Code for Nurses" guidelines for ethical practice, or the National Student Nurses' Association "Code of Academic and Clinical Conduct."
3. Failure to maintain a grade point average (GPA) appropriate to the program.
4. A documented pattern of unprofessional behavior in the classroom or clinical setting.
5. Unsafe practice in the clinical area.
6. A grade of C- or below in a second nursing course or a repeated nursing course during the entire program.
7. Failure to notify the School of Nursing of changes in a criminal arrest history.

Students dismissed from the nursing program related to clinical/classroom deficiencies must petition the Admission and Progression Committee for readmission if they wish to reenter the program. Matters of personal concern to the student will be considered at this time. The Admission and Progression Committee will make a recommendation to the Dean of the School of Nursing and Health Sciences regarding readmission to the nursing program.

Students have the right to appeal decisions of academic evaluation or dismissal from the program through the Academic Grievance Process of the School of Nursing and Health Sciences. The procedure for appeal is outlined in the Undergraduate Nursing Student Handbook.

Nursing Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	2-4	
Complete at least one 2-4 credit hour world language course or world language-based nursing special topics course. (This requirement can be met prior to or after starting upper-division nursing courses.)		
II. Prerequisite Courses	33-37	
BIOL 103 Human Anatomy and Lab- offered Fall	4	BIOL 103
BIOL 104 Human Physiology and Lab- offered Spring	3	
BIOL 111 Clinical Microbiology and Lab	4	MATH 101 or above
CHEM 105/105L Introductory Chemistry for Nursing & Lab	4	
Writing Emphasis Course	3-4	
DATA 220 or Modern Statistics or	4	
DATA 150 Data and Society	4	BIOL 103, 104, and CHEM 105 or 111
*Must be taken prior to enrollment in junior-level nursing courses. Completing additional credit hours for math coursework may be necessary prior to enrolling in this course.		
NURS 210 Nutrition	3	
NURS 280 Pathophysiology	3	
PSYC 203 Lifespan Developmental Psychology	4	BIOL 103, 104, CHEM 105 co-requisite: BIOL 111
Choose one of the following courses:		
SOC 105 The Sociological Imagination	4	
SOC 253 Sociology of the Family	4	
III. Required Nursing Courses	59-61	
NURS 300 Special Topics in Nursing	2-4	
NURS 312 Foundations of Nursing Practice I	4	NURS 280
NURS 313 Foundations of Nursing Practice I Practicum	5	NURS 280
NURS 314 Community and Mental Health Nursing	4	NURS 280
NURS 315 Communication Skills for Nurses	2	
NURS 330 Foundations of Nursing Practice II	4	NURS 312, 313, 314, 315
NURS 331 Foundations of Nursing Practice II Practicum	6	NURS 312, 313, 314, 315
NURS 370 Nursing Scholarly Inquiry and Informatics	3	NURS 315, 330, 331, and 406
NURS 406 Nursing Pharmacology	4	NURS 312, 313, 314, 315

Requirement Description	Credit Hours	Prerequisites
NURS 414 Foundations of Nursing Practice III	4	NURS 315, 330, 331, 406
NURS 415 Foundations of Nursing Practice III Practicum	4	NURS 315, 330, 331, 406
NURS 417 Transitional Care Nursing Practicum	2	NURS 315, 330, 331, 406
NURS 418 Transitional Care Nursing	3	NURS 315, 330, 331, 406
NURS 419 Leadership in Nursing	2	NURS 370, 414, 415, 417, 418
NURS 425 Ethics in Professional Nursing	2	NURS 370, 414, 415, 417, 418
NURS 430 Capstone Practicum	6	NURS 370, 414, 415, 417, 418
NURS 431 Capstone Synthesis	2	NURS 370, 414, 415, 417, 418
Total Hours for the Nursing Major	94-102	

Recommended Plan of Study

Most courses are offered in the fall and spring. This Recommended Plan of Study is based on 1st year incoming students completing the degree in 4 years. Please consult an advisor based upon your individual circumstances.

	Fall Semester	Spring Semester	Summer Semester
Year 1	*BIOL 103 (4) WCore 1 (3-4) WCore 2 (3-4) Elective (3-4) <i>Total: 13-16 credit hours</i>	*BIOL 104 (4) ***CHEM 105 (4) WCore 3 (3-4) WCore 4 (3-4) <i>Total: 14-16 credit hours</i>	
Year 2	*BIOL 111 (4) DATA 220 (4) or DATA 150 (4) PSYC 203 Growth and Development (4) *World Language (4) <i>Total: 16 credit hours</i>	*NURS 280 Pathophysiology (3) *NURS 210 Nutrition (3) WCore 5 (3-4) WCore 6 (3-4) Elective (1-4) <i>Total: 15-18 credit hours</i>	Service Learning or May Term Trip (3-4)
Year 3	NURS 312 Foundations I (4) NURS 313 Foundations L (5) NURS 314 Mental Health/Community (4) NURS 315 Communication Skills for Nurses (2) <i>Total: 15 credit hours</i>	NURS 330 Foundations II (4) NURS 331 Foundations II L (6) NURS 406 Nursing Pharmacology (4) <i>Total: 14 credit hours</i>	NURS 300 (2-4) Specialty Topics course may be taken prior to this semester or as a May term
Year 4	NURS 370 Nursing Scholarly Inquiry & Informatics (3) NURS 414 Foundations III (4) NURS 415 Foundations III L (4) NURS 417 Transitional Care Nursing Practicum (2) NURS 418 Transitional Care Nursing (3) <i>Total: 16 credit hours</i>	NURS 419 Leadership in Nursing (2) NURS 425 Ethics (2) NURS 430 Capstone (6) NURS 431 Capstone Synthesis (2) Elective (1-4) <i>Total: 12-16 credit hours; 12 credits without specialty topics or 13-16 with elective or specialty topics</i>	

WCore courses include: Social and Behavioral Sciences (2 courses), Fine Arts and Humanities (2 courses), and Science and Mathematics (2 courses).

The plan outlined above also assumes maximum usage of allowable WCore double dipping.

* Prerequisites

** DATA 150 or DATA 220 must be taken prior to junior year nursing courses.

***MATH 101 is a pre/co-requisite for CHEM 105

May and Summer Terms

Elective courses are offered during May Term, please refer to course schedules for these courses. Nursing students who follow this basic plan of study are strongly encouraged to take WCore courses during the summer to lighten their semester course loads. Clinical requirements in the junior and senior years make it difficult to coordinate WCore courses.

Options for Advanced Standing

Transfer Students

Program requirements must be met by all nursing students. Transfer students may meet some of their requirements by equivalent transfer credit.

Microbiology and human physiology must have been taken within the past five years. Students who completed these courses longer than five years ago may repeat the courses or submit a current transcript documenting successful completion of a pathophysiology course within the last three years.

Nursing prerequisite courses need to be fulfilled by students with prior degrees. Individual evaluations of comparable academic coursework, taken in an accredited college or university, will be made by the nursing program.

PUBLIC HEALTH

Faculty

- John Contreras
- Han Kim
- Colette McAfee (Director)
- Rachel Myrer

Program Goals

- Apply critical thinking skills to recognize the public health problems of vulnerable populations on a social and community scale.
- Describe multidisciplinary and ecological public health issues and concerns.
- Describe the biological basis of health and disease from a population viewpoint.
- Understand the role of health promotion and health prevention in public health.
- Recognize the role of quantitative methods in addressing public health issues.
- Utilize health policy and health administration to positively influence public health.
- Understand the role of the environment on health.
- Apply cultural competencies and ethical considerations to public health problems.
- Utilize knowledge in global health issues and global consciousness to address health issues worldwide.

Objectives

The Public Health program at Westminster University prepares those interested in a career in public health or health sciences with the proper tools necessary to promote health and prevent illness in Utah, the Intermountain West, the United States, and the world. The program is grounded in the belief that effective public health practitioners are properly trained in the core competencies of public health: critical analysis and assessment, policy development and program planning, communication, cultural and global competency, community dimensions of practice, basic public health science, and leadership and systems thinking. We accomplish this while embracing the core values of Westminster University: impassioned teaching and active learning, respect for diverse people and perspectives, collaboration and teamwork, personal and social responsibility, university-wide excellence and high ethical standards.

This educational endeavor allows us to prepare public health and health science workers who are truly ready to meet the health challenges of the 21st century and to meet the diverse needs of public health locally, nationally and globally.

Program Requirements

The undergraduate degree in public health can be completed in four years. Requirements include coursework in the humanities, life sciences, behavioral and physical sciences, world languages, and public health. Many of the courses are structured such that they are sequential.

The academic minor requires 22 credits to complete. Requirements include 14 credits of public health coursework and 8 credits of approved electives.

Additional information about university policies is provided in the Degree Requirements and Academic Policies and Procedures sections of the catalog.

Students must meet the university-wide graduation requirements in addition to the Public Health major:

- 124 total hours
- 30 upper division hours
- WCore or Honors College requirements

Public Health Major

Requirement Description	Credit Hours	Prerequisites
I. World Language Requirement	4	
Public Health majors must complete four (4) credit hours in a single world language.		

Requirement Description	Credit Hours	Prerequisites
II. Prerequisite Courses	14-15	
PHIL 216 Ethical Issues in Health and Healthcare Choose one of the following courses: CHEM 105/CHEM 105L Introductory Chemistry for Nursing & Lab CHEM 111 Principles of Chemistry I and Lab Choose one of the following courses: BIOL 103 Human Anatomy and Lab BIOL 104 Human Physiology and Lab BIOL 111 Clinical Microbiology and Lab Choose one of the following courses: PSYC 105 Bust That Psych Myth SOC 105 The Sociological Imagination	3 4 4 4 4 4 4	MATH 101 or above co-requisites: CHEM 111R recommended/ MATH 144 required BIOL 103
III. Lower Division Courses	15	
PUBH 101 Introduction to Public Health PUBH 190 Public Health Seminar I PUBH 210 Infectious and Chronic Diseases PUBH 240 Applied Quantitative Methods in Public Health PUBH 250 Global Health	3 1 3 4 4	PUBH 101
IV. Upper Division Courses*	19	
PUBH 305 Epidemiology PUBH 310 Social and Behavioral Factors in Public Health PUBH 320 Environmental Health PUBH 390 Public Health Seminar II Take two of the following courses: PUBH 330 Health Promotion and Education PUBH 340 Health Policy PUBH 350 Program Planning and Evaluation	4 4 4 1 3 3 3	PUBH 101, 210 PUBH 101, 210 PUBH 305 or PUBH 240 or DATA 220 PUBH 190 PUBH 310 PUBH 101 PUBH 305, 310
V. Senior Capstone	8	
PUBH 480 Public Health Research Methods PUBH 490 Public Health Capstone Project	4 4	PUBH 305, 310, 320 PUBH 480
VI. Electives	12	
Students choose 12 hours of Public Health or related coursework, listed below.		
Total Hours for the Public Health Major	72-73	

* A total of 30 upper-division credits (300 or above) are required for graduation.

Suggested Elective Coursework

Electives must be approved by the student's advisor. Because of the broad nature of public health, electives can be from a diverse number of departments and schools. Courses used as part of the major requirements cannot be used again as electives. The following are suggestions based on the student's specific area of interest. **Please note these courses may have prerequisites that will also need to be fulfilled:**

Requirement Description	Credit Hours	Prerequisites
Administration/Policy		
COMM 240 Media and Society	4	COMM 211
COMM 340 Communication Theory and Persuasion	4	
MGMT 430 The Nonprofit Organization	4	
MGMT 433 Organizational Behavior	4	MGMT 305
PLSC 327 Environmental Politics and Policy	4	
Life Sciences		
BIOL 103 Human Anatomy and Lab	4	BIOL 103
BIOL 104 Human Physiology and Lab	4	
BIOL 111 Clinical Microbiology and Lab	4	
BIOL 303 Microbiology and Lab	4	BIOL 204, 205, CHEM 112
BIOL 350 Biochemistry and Lab	4	BIOL 205, CHEM 304
BIOL 402 Immunology and Lab	4	BIOL 204, 205; CHEM 112, 303 BIOL 303 recommended
CHEM 111–112 Principles of Chemistry I and II and Lab	4–4	CHEM 111 co- requisites: CHEM 111R recommended/ MATH 144 required/CHEM 111
CHEM 303–304 Organic Chemistry I and II and Lab	4–4	CHEM 111, 112
CHEM 350 Biochemistry and Lab	4	BIOL 205, CHEM 303
ENVI 101 Introduction to Environmental Studies	4	
Social Sciences		
PSYC 216 Social Psychology	4	PSYC 105
PSYC 363 Exploring Addictions	3	PSYC 252, 270
SOC 313 Social Theory	4	SOC 105
SOC 345 Sociology of Sexualities	4	
SOC 390 Social Research Methods	4	
WCSBS 109 Imagining (In)justice	4	
Statistics/Informatics		
CMPT 201 Introduction to Computer Science	4	MATH 101
CMPT 202 Introduction to Data Structures	4	CMPT 201
CMPT 307 Databases	4	CMPT 202
CMPT 335 Computer Security	4	CMPT 251
MATH 202 Calculus II	4	MATH 201 or placement test
MATH 203 Multivariate Calculus	4	MATH 202

Requirement Description	Credit Hours	Prerequisites
MATH 210 Discrete Mathematics	4	MATH 202
MATH 310 Probability and Statistics	4	

Recommended Plan of Study for Public Health

	Fall Semester	Spring Semester
Year 1	Learning Community WCore WCore Language	PUBH 101 WCore WCore Language
Year 2	BIOL prerequisite DATA PUBH 101	CHEM prerequisite PUBH 190 PUBH 210 PUBH 250
Year 3	PHIL 216 PUBH 305 PUBH 310 PUBH 390	PUBH 320 PUBH 330/340/350 PUBH 390 PUBH elective
Year 4	PUBH 330/340/350 PUBH 480 PUBH elective	PUBH 490 PUBH elective

Public Health Minor

Requirement Description	Credit Hours	Prerequisites
I. Required Courses	18	
PUBH 101 Introduction to Public Health	3	PUBH 101, 210
PUBH 210 Infectious and Chronic Diseases	3	
PUBH 240 Applied Quantitative Methods in Public Health	4	
PUBH 250 Global Health	4	
PUBH 305 Epidemiology	4	
II. Electives	4	
Four (4) hours of Public Health or related coursework, 300-level or above		
Total Hours for the Public Health Minor	22	