One Health Major

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The health of people, animals and the environment are intimately connected. The One Health major recognizes these connections and studies health at their intersection. As the human population grows and the health of the environment degrades, humans are coming into closer contact with animals. Because of this, countries may see more zoonotic diseases (e.g. Ebola) spreading to human populations. As human populations grow, they put more pressure on the environment and introduce more environmental chemicals, many with unknown and some with transgenerational effects. This major will set the scientific foundation and then explore some of the vectors that transmit disease, discuss global health issues, examine personal ethics, investigate the impacts of chemistry and delve into the interface of human, animals and the environment. This major will prepare students to address these One Health issues. Students with this major may find employment in both the public health sector as well as in wildlife biology or veterinary science.

Students majoring in One Health may not also major or minor in Biology or Environmental Science. Students may double major in Biochemistry (Biological Emphasis) but must do so in close coordination with the Department of Biological and Environmental Sciences. To earn a major in One Health, students must earn a letter grade of C- or better in all listed courses needed to satisfy major requirements. At least 50% of all One Health hours used to satisfy the major must be Westminster College courses.

ACADEMIC REQUIREMENTS SUMMARY SHEET **ACADEMIC YEAR 2025-2026**

One Health Major

Student's Last Name First Name Middle Initial

Advisor Date Major Declared

Course Code	Course Title	Hours	Semester	Grade
Required Courses (23 hours)				
BIO 114/115	Bioprocesses	4		
BIO 124/125	Biodiversity	4		
CHM 114/115	General Chemistry I	4		
CHM 124/125	General Chemistry II	4		
ENV 105	Intro to Environmental Science	4		
MAT 114	Elementary Statistics	3		
Students are encouraged to complete the above courses in their first 3-4 semesters.				
Disease Transmission & Suppression (Choose one of the following: 3-4 hours)				
BIO 303	Microbiology	4		
BIO 304	Immunology	3		
BIO 315	Entomology	4		
BIO 330	Virology (BIO 225 recommended)	3		
Human Health (6 hours)				
HES 261	Intro to Epidemiology			
HES/GTS 240	Intro to Global Public Health	3		
Or HES/WGS 355	Women's Health Issues	3		
Or HES 357	Community Nutrition	3		
Ethical Perspectives and the Environment (Choose one of the following: 3 hours)				
PHL 246	Environmental Ethics	3		
PHL 212	Introduction to Ethics	3		
Animals Interacting with their Environment (Choose one of the following: 3-4 hours)				
BIO 205	Ecology & Field Biology	4		
ENV 350	Conservation Biology	3		
The Health Impacts of Chemistry (Choose one of the following: 3 hours)				
BIO 310	Environmental Toxicology	3		
CHM 410	Medicinal Chemistry	3		
Capstone Course (1 hours)				
BIO/ENV/HES 400	One Health Capstone	1		
	Total Hours	42-44		