

HEALTH SCIENCES

(413) 662-5153

www.mcla.edu/hlth (<http://www.mcla.edu/hlth/>)

Chairperson: Justin Golub, Ph.D.

Email: J.Golub@mcla.edu

Health Sciences Major

The general Health Sciences degree prepares students to pursue careers and advanced study in a variety of health fields.

Students graduating with a major in Health Sciences will be able to:

- Understand and apply fundamental concepts in the discipline;
- Find and analyze primary literature in the field;
- Design an experiment to test a hypothesis;
- Demonstrate appropriate technical skills in the laboratory;
- Analyze data, with appropriate statistical analysis;
- Communicate the findings of a scientific experiment or information about a pathology.

MCLA - Russell Sage College Applied Nutrition and Nutrition and Dietetics Articulation Programs

Strong students who have met the requirements in the articulation agreement are guaranteed admission to the Master of Science in Applied Nutrition and Master of Science in Nutrition and Dietetics programs at Russell Sage College in Albany and Troy, NY.

MCLA - Russell Sage College Articulation Program in Pre-Occupational Therapy

Strong students who meet the requirements outlined in the articulation agreement gain preferred admission to the M.S. in Occupational Therapy program at Russell Sage College in Albany and Troy, NY.

MCLA - Russell Sage College Articulation Program in Pre-Physical Therapy

Strong students who meet the requirements outlined in the articulation agreement gain preferred admission to the Doctor of Physical Therapy program at Russell Sage College in Albany and Troy, NY.

Health Science Achievement Award

This award recognizes the achievement of a student in their junior year (at least 1 full semester of classwork remaining) of the Health Science, Athletic Training, and Public Health and Community Health Education major(s). Factors for consideration are GPA, course and department involvement (independent research, TA, SI, etc.), and extracurricular activities.

Transfer of Anatomy and Physiology

Biology, Health Science, Radiologic Technology, Public Health and Community Health transfer students who completed Anatomy & Physiology I and II from an institution with a course number less than 300 will be required to take *either* BIOL 343 Anatomy and Physiology II, or BIOL 404 Research Methods in Human Physiology.

Health Sciences Programs

- Environmental Health Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/environmental-health-minor/>)
- Health and Society Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-and-society-minor/>)
- Health Sciences - Medical Technology Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-medical-technology-concentration-bs/>)
- Health Sciences - Nutrition Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-nutrition-concentration-bs/>)
- Health Sciences - Pre-Occupational Therapy Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-occupational-therapy-concentration-bs/>)
- Health Sciences - Pre-Physical Therapy Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-physical-therapy-concentration-bs/>)
- Health Sciences - Pre-Physician Assistant Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-physician-assistant-concentration-bs/>)
- Health Sciences - Sports Medicine Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-sports-medicine-concentration-bs/>)
- Health Sciences, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-bs/>)
- Public Health Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/public-health-minor/>)

Health Courses

HLTH 100 Clinical Observation

1 cr

Allows the student to learn about a specific health care field through direct observation of clinical practice. The student will work with a faculty sponsor and a clinical supervisor. Students will complete clinical observation and will participate in scheduled discussions about the observation experience. This course is graded on a pass-fail basis and is repeatable to 3 credits. HLTH 100 may be paired with BIOL 500 Independent Study for advanced exploration of the field.

Prerequisite: Department approval

Repeatable: Maximum of 3 credits

HLTH 105 Medical Terminology

1 cr

Allows recognition and accurate use of terminology that describes the human body and its pathological processes, conditions and diseases. Terminology related to procedures and clinical tests will also be addressed.

HLTH 110 Introduction to Healthcare

3 cr

Provides content for a comprehensive survey and introduction to the U.S. health care system. Topics and discussions will include public health, financing of health care, health insurance, politics, health care providers, and delivery of health care. The course will introduce concepts of regulation, legislation, ethics, and elements of health care reform.

<p>HLTH 115 Science of Human Wellness 3 cr</p> <p>Engages students with current ideas for maximizing human health, with an emphasis on separating pseudoscience from evidence-based practices. Questions addressed include: Is there an "optimal" diet? How much physical activity do humans need, and of what type? How is our modern lifestyle impacting our psychological and physical health? Students will apply these concepts towards their own physical and mental well-being. Students will engage in wellness activities incorporating physical activity and mental health.</p> <p>Attributes: Core Health and Wellness (CHW)</p>	<p>HLTH 210 Human Growth and Development 3 cr</p> <p>Explores the life cycle from conception to death. Biological, sociological and psychological perspectives will be examined and applied to everyday situations and social issues.</p> <p>Attributes: Core Self & Society (CSS)</p>
<p>HLTH 150 Introduction to Community and Public Health 3 cr</p> <p>Introduces the fields of Public Health, Health Education and Health Promotion. Topics will include the history of public health, health status, health care philosophy, health and wellness, chronic and infectious diseases, health-related behavior, health theories and program models. Students will learn to use library databases and write a review of health-related literature. A service learning component will allow students to establish projects and relationships that will benefit the community.</p> <p>Attributes: Core Self & Society (CSS)</p>	<p>HLTH 210H Honors: Human Growth and Development 3 cr</p> <p>Explores the life cycle from conception to death. Biological, sociological, and psychological perspectives will be examined and applied to everyday situations and social issues.</p> <p>Attributes: Core Self & Society (CSS), Honors Program (HONR)</p>
<p>HLTH 150H Honors: Introduction to Community and Public Health 3 cr</p> <p>Introduces the fields of Public Health, Health Education and Health Promotion. Topics will include the history of public health, health status, health care philosophy, health and wellness, chronic and infectious diseases, health-related behavior, health theories and program models. Students will learn to use library databases and write a review of health-related literature. A service learning component will allow students to establish projects and relationships that will benefit the community.</p> <p>Attributes: Core Self & Society (CSS), Honors Program (HONR)</p>	<p>HLTH 295 Special Topics in Health Studies 1-4 cr</p> <p>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the high introductory level.</p> <p>Prerequisite: Will vary depending on the course</p> <p>Repeatable: Unlimited Credits</p>
<p>HLTH 195 Special Topics in Health Studies 1-4 cr</p> <p>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the introductory level.</p> <p>Repeatable: Unlimited Credits</p>	<p>HLTH 300 Ethical Issues in Health Care 3 cr</p> <p>Examines the moral traditions and ethical principles relevant to life, and their application in present-day clinical care and biomedical research. Introduces students to the historical, theoretical, and thematic dimensions of health care ethics. Focuses on main ethical terms and concepts, as well as decision-making procedures that students can use to discern and defend moral courses of action in health care.</p> <p>Prerequisite: Junior/senior status</p>
<p>HLTH 200 Health Promotion and Planning 3 cr</p> <p>Introduces students to health promotion programs. Students will develop health education materials and teaching strategies for individuals and groups across the life span and in a variety of settings. Students will explore health behavior design theory, health education needs assessments, instructional strategies, learner characteristics, teaching materials and aids, learning environments, and evaluation methods.</p> <p>Attributes: Core Self & Society (CSS)</p>	<p>HLTH 310 Environmental Health 3 cr</p> <p>Provides a multidisciplinary understanding of the science, practice, laws and policy of environmental health sciences, addressing why risk of disease is modulated by the environment. Topics include types and sources of environmental contaminants, exposure assessment, types of microenvironments, human behavior and time-location-activity patterns, toxicology, the risk assessment paradigm, basics of environmental and occupational epidemiology, and communicating about environmental health sciences.</p> <p>Prerequisite: Junior/senior status and BIOL 150 or HLTH 150 or HLTH 150H</p>
<p>HLTH 200H Honors: Health Promotion and Planning 3 cr</p> <p>Introduces students to health promotion programs. Students will develop health education materials and teaching strategies for individuals and groups across the life span and in a variety of settings. Students will explore health behavior design theory, health education needs assessments, instructional strategies, learner characteristics, teaching materials and aids, learning environments, and evaluation methods.</p> <p>Attributes: Core Self & Society (CSS), Honors Program (HONR)</p>	<p>HLTH 321 Lower Body Assessment 4 cr</p> <p>Explores all aspects of injury evaluation. Injuries to the lower extremity and lumbar spine will be stressed through lecture and lab.</p> <p>Prerequisite: BIOL 342</p> <p>Corequisite: HLTH 321L</p>
<p>HLTH 201 Exercise Science 3 cr</p> <p>Facilitates an understanding of exercise based on the principles related to training basics, energy systems, muscular fitness and biomechanics. Students will learn to develop training programs for better physical performance and health.</p> <p>Attributes: Core Health and Wellness (CHW)</p>	<p>HLTH 322 Upper Body Assessment 4 cr</p> <p>Explores all aspects of injury evaluation. Injuries to the upper extremity and cervical spine will be emphasized through lecture and lab.</p> <p>Prerequisite: BIOL 342</p> <p>Corequisite: HLTH 322L</p>
	<p>HLTH 337 Therapeutic Modalities 4 cr</p> <p>Explores the physiology of inflammation and pain in the context of injury. Describes the principles and effects of therapeutic modalities (including thermal, acoustic, electrical, light, and mechanical) and promotes appropriate selection and application of the modalities.</p> <p>Prerequisite: BIOL 150 and sophomore, junior, or senior status</p> <p>Corequisite: HLTH 337L</p>
	<p>HLTH 338 Therapeutic Exercise 3 cr</p> <p>Offers students the opportunity to study the techniques and principles involved in rehabilitation of athletic injuries. It includes all aspects of reconditioning exercise and rehabilitation program development.</p> <p>Prerequisite: BIOL 342</p>

HLTH 339 Therapeutic Exercise with Lab 4 cr

Offers students the opportunity to study and practice the techniques and principles involved in rehabilitation of athletic injuries. It includes all aspects of reconditioning exercise and rehabilitation program development.

Prerequisite: BIOL 342

Corequisite: HLTH 339L

HLTH 350 Health Communication 3 cr

Examines how communication affects and is intertwined with issues of health, medicine and ethics. Communication will be discussed on a personal, intimate level in the way patients and caregivers interact in the examination and hospital room; at the organizational level, in the way policies and community relations affect how health care is provided and how people feel about providers; and in media campaigns that seek to educate people about health.

Prerequisite: Junior/senior status

HLTH 395 Special Topics in Health Studies 1-4 cr

Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the advanced level.

Prerequisite: Will vary depending on the course

Repeatable: Unlimited Credits

HLTH 495 Special Topics in Health Studies 1-4 cr

Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the high advanced level.

Prerequisite: Will vary depending on course

Repeatable: Unlimited Credits

HLTH 500 Health Science Independent Study 1-3 cr

Open to junior and seniors who wish to read in a given area or to study a topic in depth. Written reports and frequent conferences with the advisor are required.

Prerequisite: Junior/senior status and department approval

Repeatable: Maximum of 12 credits

HLTH 510 Health Science Independent Research 1-3 cr

For health science majors who desire to conduct research on a specific topic in a health science field. The research will be under the direction of the instructor and will require scholarly report.

Prerequisite: Junior/senior status, department approval

Repeatable: Maximum of 12 credits

HLTH 540 Internship in Community Health Education 3 cr

Provides students with hands-on experience outside of the college in the field of community health and wellness. The student will work with a faculty sponsor and an off-campus supervisor, as appropriate. Repeatable up to 12 credits.

Prerequisite: HLTH 200 and junior/senior status and department approval

Repeatable: Maximum of 12 credits

HLTH 590 Health Internship 1-15 cr

Provides students with hands-on experience in health fields. The student will work with a faculty sponsor and an off-campus supervisor, as appropriate.

Prerequisite: Junior/senior status and department approval

Repeatable: Maximum of 15 credits

Athletic Training Courses

ATTR 220 Introduction to Athletic Training I 3 cr

Introduces students to the field of athletic training and sports medicine.

Explores fundamental principles of athletic training, which includes terminology, physical conditioning and injury prevention.

Corequisite: ATTR 100