

Petition of exception:

For students enrolled in health sciences programs, all petitions of exception must be reviewed by an academic adviser and the appropriate program director before referral to the Health Sciences Committee on Instruction. See the *Academic Policies and Procedures* section of the catalog for further information (*Petition of exception*).

Applied Health Sciences Program

Health Sciences Director: *Richard J. Rożek*

Professor Emeritus: *Ronald E. Olson*

Professors: *Gary D. Russi, Kenneth R. Hightower*

Associate professor: *Richard J. Rożek*

Clinical professors: *Moon J. Pak, Donald Bronn*

Clinical assistant professors: *J. Kay Felt, Todd Lininger, Lynne M. Prybys, Monica Wilkinson*

Adjunct assistant professor: *Anthony Tersigni*

Clinical instructors: *Kim Bezas, Jennifer M Cook, Angela Fern, Jennifer Guthrie, Elizabeth M. Mikulec, Donna Morrison*

The School of Health Sciences offers a Bachelor of Science in Applied Health Sciences as part of an articulation agreement with the Health and Human Services department at Macomb Community College to meet the demands of a highly educated workforce and high-performance workplace. Under the terms of this agreement, students who earn an Associate of Applied Science degree in health information technology, medical assistant, occupational therapy assistant, physical therapist assistant, respiratory therapy, and surgical technology at Macomb Community College may transfer to Oakland University and earn a B.S. in Applied Health Sciences with a health information technology, medical assistant, occupational therapy assistant, physical therapist assistant, respiratory therapy, or surgical technology concentration. Students must meet the requirements at their respective institutions; at OU that means completing university general education, U.S. diversity, writing and major requirements. The degree in Applied Health Sciences combines a broad spectrum of liberal arts and health sciences courses.

Requirements for the B.S. degree with a major in applied health sciences

1. Meet the university general education requirements (see *Undergraduate degree requirements*).
Note that several courses under #3 below satisfy general education requirements and Applied Health Sciences degree requirements. See courses marked with “”.*
2. Complete the university U.S. diversity requirement. For applied health sciences majors, this requirement is satisfied by completing HS 302.
3. Complete the following courses: EXS 350 or NH 300; HS 201; HS 302; WHP 310*; AHS 450*; AHS 301; AHS 401; AHS 304; AHS 306; AHS 331; STA 225*. (*Courses that also satisfy the university general education requirement).
4. Complete 8 credits of electives from: EXS 321, 360, 405, 406, 410, 415, 425, 435, 445, 465; HS 441; NH 311, 330/331, 340, 401, 402, 403, 404, 405, 446; WHP 315, 325, 350.
5. Complete the course requirements for the Associate of Applied Science degree in one of the following six academic areas completed at Macomb Community College: health information technology, medical assistant, occupational therapy assistant, physical therapist assistant, respiratory therapy, or surgical technology.

Course Offerings

AHS 301 Human Nutrition and Health (4)

Chemical, biological, social and psychological elements of human nutrition. Constituents of food and their functions in human health and disease. Identical with NH 301 and HS 301.

AHS 304 Exercise Physiology (3)

Effects of exercise and physical training on the physiological systems of the body, with emphasis on cardio-respiratory systems. Includes muscle contraction mechanisms, circulatory and respiratory adjustment during exercise, and nutrition for physical activity. Cross-listed with EXS 304.

Prerequisite: BIO 111 and BIO 207.

Co-requisite: AHS 306.

AHS 306 Exercise Physiology Laboratory (1)

Laboratory experiences are provided for insight into the dynamics of human movement from research and clinical perspectives. Cross-listed with EXS 306.

Prerequisite: BIO 111 and BIO 207.

Co-requisite: AHS 304.

AHS 331 Pharmacology (2)

An introduction to the principles of pharmacology, including the principles of drug therapy and the actions of the basic classes of drugs. Will satisfy requirements for NRS 230. Cross-listed with HS 331.

Prerequisite: BIO 207 or 321.

AHS 335 Health Care Safety (4)

Review common safety practices to be used throughout the health care arena (covering both employee and patient safety) including incident reporting, infection control, lifting techniques, error prevention, reporting systems, workforce issues, accountability, laws and regulations and the promotion and implementation of safety programs and practices.

Prerequisite: HS 201, 302.

AHS 340 Delivering Safe Patient Care (4)

Discusses the core principles and best practices of patient safety in both hospital and ambulatory care settings by focusing on error prevention, reporting systems and information technology, workforce issues, training issues, accountability and various laws and regulations.

Prerequisite: HS 201, 302.

AHS 345 Hospital Safety and Health (4)

Concentrates on the principles and practices of safety in the hospital setting by focusing on exposures including tuberculosis, needle-sticks, anesthesia gases, latex allergies, radiation, medical waste, and the controls necessary to prevent injury both to the health care employee and the patient.

Prerequisite: HS 201, 302.

AHS 401 Human Pathology (4)

Basic principles of human pathology appropriate for students pursuing curricula in the health-related disciplines. Diseases of the major systems of the body are studied. Credit will not be granted for both HS 401 and HS 501. Cross-listed with HS 401, HS 501.

Prerequisite: BIO 111 and BIO 207 or BIO 321.

AHS 450 Law, Values and Health Care (4)

Examination of legal concepts, problems, institutions that shape/control professional responsibility, problems associated with maintaining and terminating life, licensure and related questions in organization and delivery of health services. *Satisfies the university general education requirement for the capstone experience.*

Satisfies university general education requirement for a writing intensive course in the major. Prerequisite for writing intensive: completion of the university writing foundation requirement.

Identical with MLS 450 and HS 450.

Prerequisite: Junior standing.

Health Information Technology concentration course requirements

Students completing the **health information technology concentration** become experts in managing patient health information, administering computer information systems and coding the diagnosis and procedures for health care services provided to patients. Health Information Technology is one of the few health occupations in which there is little or no direct contact with patients. For more information on the health information technology program at Macomb Community College, visit their website at <http://www.macomb.edu/academics/departments/hitt/default.asp>.

Students completing the Bachelor of Science in applied health sciences with a health information technology academic concentration must complete all courses required for the Associate of Applied Science in health information technology at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.

Medical Assistant concentration course requirements

Students completing the **Medical Assistant concentration** are prepared to perform a variety of administrative and clinical tasks to keep health care delivery settings running smoothly. Medical assistants perform many clerical as well as clinical duties. Clinical duties vary according to state law and include taking and recording vital signs and medical histories; explaining treatment procedures to patients; preparing patients for examination, and assisting during the examination. Medical assistants collect and process laboratory specimens, perform basic laboratory tests, dispose of contaminated supplies, and sterilize medical instruments. For more information on the medical assistant program at Macomb Community College, visit its website at <http://www.macomb.edu/academics/departments/mast/default.asp>.

Students completing the Bachelor of Science in applied health sciences with a medical assistant academic concentration must complete all courses required for the Associate of Applied Science in medical assistant at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.

Occupational Therapy Assistant concentration course requirements

Students completing the **occupational therapy assistant concentration** learn to assist occupational therapists in providing occupational therapy treatments and procedures. OTA's assist in development of treatment plans, carry out routine functions, direct activity programs, and document the progress of treatments to individuals with physical, mental or developmental disabilities to help them regain functional, productive lives. For more information on the occupational therapy assistant program at Macomb Community College, visit its website at <http://www.macomb.edu/academics/departments/otas/default.asp>.

Students completing the Bachelor of Science in applied health sciences with an occupational therapy assistant concentration must complete all courses required for the Associate of Applied Science in occupational therapy assistant at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.

Physical Therapist Assistant concentration course requirements

Students completing the **physical therapist assistant concentration** learn to assist physical therapists in the provision of care. Working under the direction and supervision of a physical therapist, PTAs work to restore function, reduce pain and enhance wellness in patients with a variety of conditions. Physical Therapist Assistants provide selected interventions for patients with orthopedic, neurological, athletic, occupational and congenital conditions. Students who wish to become physical therapists should note that this major does not meet the entrance requirements for the Doctor of Physical Therapy program. Students who are interested in an undergraduate degree that includes prerequisites for the Doctor of Physical Therapy program should see the major in Health Sciences with a Pre-Physical Therapy concentration. For more information on the physical therapist assistant program at Macomb Community College, visit its website at <http://www.macomb.edu/academics/departments/ptas/default.asp>.

Students completing the Bachelor of Science in applied health sciences with a physical therapist assistant academic concentration must complete all courses required for the Associate of Applied Science in physical therapist assistant at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.

Respiratory Therapy concentration course requirements

Students completing the **respiratory therapy concentration** are prepared to work as Respiratory Care Practitioners (RCP). RCPs monitor, evaluate and treat patients with pulmonary disease. The routine duties of a RCP include oxygen administration and monitoring, drawing arterial blood gas samples, delivery of aerosol medication, pulmonary hygiene and lung volume expansion. In the emergency and critical care areas, therapists are trained in cardiopulmonary resuscitation and are responsible for setting-up, monitoring and evaluating life support machines. For more information on the registry therapy program at Macomb Community College, visit its website at <http://www.macomb.edu/academics/departments/rspt/default.asp>.

Students completing the Bachelor of Science in applied health sciences with a respiratory therapy academic concentration must complete all courses required for the Associate of Applied Science in respiratory therapy at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.

Surgical Technology concentration course requirements

Students completing the surgical technology concentration are prepared to work under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. Certified surgical technologists (CSTs) work under the supervision of a surgeon to ensure that the operating room environment is safe, that the equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety. For more information on the Surgical Technology program at Macomb Community College, visit their website at <http://www.macomb.edu/academics/departments/surg/default.asp>.

Students completing the Bachelor of Science in applied health sciences with a surgical technology academic concentration must complete all courses required for the Associate of Applied Science in surgical technology at Macomb Community College before being admitted into the Bachelor of Science in Applied Health Sciences at Oakland University. See a School of Health Sciences academic adviser for more information.