



# SCHOOL OF HEALTH SCIENCES UNDERGRADUATE PROGRAMS

# LETTER FROM THE DEAN



Dear Parents and Students,

Through its mission, Oakland University's School of Health Sciences serves the community health care needs and prepares our students to become leaders in health care, wellness, safety and clinical laboratory sciences. I invite you, on behalf of our faculty and staff, to visit our beautiful and well-located campus to experience firsthand some of the career-building opportunities and diverse activities that make up our vibrant student life. The School of Health Sciences houses

undergraduate degree programs in occupational safety and health; wellness, health promotion and injury prevention; biomedical diagnostic and therapeutic sciences; applied health sciences; and health sciences.

These diverse choices reflect a dozen opportunities to receive a special health profession education with degrees or certificates in more than a dozen distinct and timely fields leading to hundreds of health care careers. So whether your interest lies in primary or secondary direct patient care or in working behind the scenes in laboratories or behind technologically advanced diagnostic equipment in clinics or hospitals, come visit us to explore your future in a world that needs health care professionals more than ever.

Through our core values, we focus on student education, faculty commitment, leadership and professional enrichment.

Richard Rozek, Ph.D.  
Interim Dean and Associate Professor  
School of Health Sciences

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## HEALTH SCIENCES

A Bachelor of Science in Health Sciences (HS) degree combines liberal arts, basic science, social science, and health science courses for students who desire a generalized health science academic credential. Students choose one of six academic concentration areas to gain relevant knowledge and skills in a specific health discipline. These concentration areas include Exercise Science, Integrative Holistic Medicine, Nutrition and Health, Pre-Health Professional Studies, Pre-Pharmacy, and Pre-Physical Therapy.

### Exercise Science concentration

Prepares students for broad careers in the exercise and fitness arenas as well as for graduate study in Exercise Science and other disciplines.

### Integrative Holistic Medicine concentration

Prepares students for traditional and non-traditional career opportunities in community-based and medical organizations emphasizing patient-centered practices.

### Nutrition and Health concentration

Emphasizes the relationship between diet and health status and prepares students for work in a variety of clinical and public health fields.

### Pre-Health Professional concentration

Incorporates basic science courses to prepare students for careers in labs, research and medical centers as well as graduate work in medicine, dentistry, public health, physician assistant studies, and other professional fields.

### Pre-Pharmacy concentration

Prepares students to meet the academic prerequisites necessary to be considered for admission to Doctor of Pharmacy programs, including those at Wayne State University.

### Pre-Physical Therapy concentration

Prepares students to meet the application requirements for Doctor of Physical Therapy (DPT) programs.



## APPLIED HEALTH SCIENCES

The Bachelor of Science in Applied Health Sciences (AHS) degree prepares students for advancement in their chosen medical fields and beyond. Students in this major must have already completed their Associate of Applied Sciences degree in one of these programs:

Respiratory Therapy, Health Information Technology, Surgical Technology, Physical Therapist Assistant Studies, Medical Assistant Studies, or Occupational Therapy Assistant Studies.

Upon admission, students then complete the Applied Health Sciences curriculum and any necessary general education courses at Oakland University. Students are advised to read carefully about their chosen concentration.

## BIOMEDICAL DIAGNOSTIC AND THERAPEUTIC SCIENCES

The Biomedical Diagnostic and Therapeutic Sciences (BDTS) program is designed to prepare students for professional opportunities in a variety of settings. Graduates may find employment in hospital or commercial clinical laboratories, research laboratories or public health facilities.

Positions within biomedical corporations, including research and development, quality assurance and sales or service may also be prospective sources of employment. Furthermore, because it meets basic academic requirements, the curriculum for BDTS provides excellent preparation for entry into post-baccalaureate professional programs including medicine, dentistry and osteopathy.

The Biomedical Diagnostic and Therapeutic Sciences program at Oakland University addresses SIX specializations:

### Cytotechnology

Cytotechnologists are trained medical laboratory scientists who detect disease by light microscopic examination cell samples from all areas of the human body. They are able to detect abnormal cells and provide preliminary diagnostic information.



### Histotechnology

Histotechnologists perform a variety of diagnostic and research procedures in the anatomic sciences. During the clinical internship students will learn histological techniques that involve processing, sectioning, and staining of tissue specimens that have been removed from humans or animals by biopsy, surgical procedures or autopsy.

### Medical Laboratory Science (formerly Medical Technology)

Medical Laboratory Scientists perform diagnostic tests on all types of body tissues and fluids, from blood to urine samples that afford important information to determine the presence, extent or absence of disease and provide data to evaluate the effectiveness of treatment.





### **Nuclear Medicine Technology**

Nuclear medicine technologists utilize small amounts of radioactive materials for diagnosis, therapy and research. Diagnosis can involve organ imaging using gamma counters to detect radioactive material administered to the patient or analysis of biologic specimens to detect levels of various substances. Therapeutic doses of radioactive materials are also given to patients to treat specific diseases.

### **Radiation Therapy**

Radiation Therapists use ionizing radiation to treat disease, especially cancer. Radiation therapists have the technical skills to plan, deliver and record a prescribed course of radiation. Their primary responsibility is to implement treatment programs prescribed by a radiation oncologist.

### **Radiologic Technology (X-Ray)**

Radiologic Technologists conduct patient scans, and evaluate images such as x-rays or computer images. They explain the procedure to the patient and monitor and observe patients throughout the procedure.

Students may be admitted as Biomedical Diagnostic and Therapeutic Science majors directly from high school or by transfer from other colleges or universities. With the exception of Medical Laboratory Science, students earning the degree in Biomedical Diagnostic and Therapeutic Sciences will complete a hospital-based clinical specialization internship program as part of the undergraduate degree. Medical Laboratory Science students complete the clinical internship post graduation.

**Acceptance into the internship programs is competitive and is based on grade point average, personal interview and letters of recommendation.**

The application process for each of the specializations is unique. Students are advised to read carefully about their chosen specialization.

# **OCCUPATIONAL SAFETY AND HEALTH**

Occupational Safety and Health is a specified branch of the health profession focusing on the workplace environment and the behaviors of workers. Protecting America's workers and the general public from injury and illness in today's age of technological advancement has become one of the most challenging and rewarding professions available. Occupational Safety and Health professionals strive to identify, evaluate, eliminate or control hazards, which expose people, property or the environment to danger or harm.

This professional is concerned with prevention of injuries or occupational diseases that may occur with the interaction between the worker and the chemical, physical, biological, ergonomic, mechanical, electrical and other forces in the work environment. Graduates of the Bachelor of Science in Occupational Safety and Health program at OU will find employment opportunities within a wide variety of occupations that include: health care facilities; industrial firms; construction companies; insurance companies; professional associations; local, state, and federal government; and labor organizations. Oakland's proximity to many of the nations leading industrial companies provides a wealth of experiential learning opportunities throughout the Occupational Safety and Health curriculum, particularly for internship placement. This degree also prepares students for the Master of Science in Safety Management.



# WELLNESS, HEALTH PROMOTION AND INJURY PREVENTION

The primary goal of the WHP program is to prepare students for entry to graduate programs of study in fields such as exercise science, health education, human resources, injury prevention, psychology, nutrition, public health, and related professional and medical fields such as a second degree in nursing, physician assistant, medicine, or occupational safety and health. WHP graduates with a 2.75 GPA may automatically register as certified wellness practitioners (CWP) with the National Wellness Institute. Therefore, a parallel secondary function of the WHP program is to prepare students for entry-level employment in a variety of allied health, commercial, industrial, government, hospital, community and non-profit organizations. Professional skills of graduates are utilized in health enhancement, disease prevention, injury prevention, health education/promotion, health and fitness, corporate and work-site wellness, as well as human resource practice and management.

The curriculum is designed to provide students with a broad-based introduction to this emerging multi-disciplinary field of study and, in addition, provides a specialization within one of eight focus areas and concludes with an internship and senior culminating experience.

## **The Additional Major in Psychology**

Focuses on health psychology, behavior change and stress management.

## **The General Health Promotion focus**

Is concerned with behavioral change, coping and motivation. Students in this focus area can complete a minor in Psychology.

## **The Health Promotion Intervention focus**

Prepares students for work in managed care and human resource development. Students in this focus area can complete the Human Resource Development minor in Training and Development.

## **The Complementary Medicine focus**

Prepares students to consider various healing modalities, healing traditions and psychosocial applications.

## **The Injury Prevention focus**

Prepares students for jobs concerned with the prevention of unintentional and intentional injury, including occupational and ergonomic applications.

## **The Exercise Science focus**

Educates students in exercise physiology, kinesiology and physical activity across the lifespan. This focus allows students to obtain all the academic course prerequisites necessary for consideration for admission to the Master of Science in Exercise Science program.

## **The Pre-Health Professional focus**

Allows students to complete 28 credit hours of preapproved coursework in preparation for entry to a recognized health profession program. Students are advised to contact the professional school(s) that they are interested in attending to obtain program admission information before designing this focus course of study.

## **The Nutrition and Health focus**

Enables students to complete a 22 credit minor in Nutrition and Health. This area is good preparation for further study in the areas of nutrition and dietetics and will make an employee more marketable with the necessary skills to assist registered dietitians.



# RESEARCH

The Prevention Research Center brings experts from Oakland University and the community together to make a difference in people's lives. Its core mission is to promote community health through education, promotion and translational research. Translational research discovers which strategies work in the community: the community of youth, women, or senior citizens - all at high risk.

Oakland University's undergraduate students have the opportunity to work with faculty on research projects funded by the School of Health Sciences. Undergraduate research projects in the School of Health Sciences were initiated in 2006 and have continued yearly. Research funds now housed in the Prevention Research Center are used to support students' research activities in the form of hourly wages, the purchase of research supplies and materials, and in providing travel monies for conference presentations.





## HUMAN HEALTH BUILDING

### Advancing Knowledge and Improving Care

The Human Health Building serves as another vital piece in Oakland University's efforts to help transform southeastern Michigan into a destination for health care training, research and treatment, boosting the state's economic and intellectual capital. This 161,000-square-foot structure includes classrooms, simulation labs, an interactive media center, physical therapy facilities, on-site clinic, seminar rooms and distance learning labs. This unique educational environment better prepares graduates to serve the community. To learn how you can support Oakland University's Human Health Building, please contact the Office of the Dean at (248) 370-3562.

## MINORS

Health Sciences Minors are available to any undergraduate students at Oakland University and include:

- Exercise Science
- Nutrition and Health
- Occupational Safety and Health
- Wellness, Health Promotion and Injury Prevention



## ACADEMIC ADVISING

The academic advisers are dedicated and available to assist students with degree requirements, course planning, registration, graduation audits and health career choices. Our office provides quality academic advising for current and prospective students seeking to learn more about programs within the School of Health Sciences. We also connect students with university services to ensure they have all of the necessary resources available to aid in their success. The academic advising staff is committed to empowering students to gain the most from their academic experiences.

Additional information is available on our website: [oakland.edu/shs/advising](http://oakland.edu/shs/advising).



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## USEFUL WEBSITES

### Explore Careers in Healthcare

- Explore Health Careers: [www.explorehealthcareers.org](http://www.explorehealthcareers.org)
- U.S. Bureau of Labor Statistics: <http://www.bls.gov/ooh/Healthcare/>

# OAKLAND UNIVERSITY™



## School of Health Sciences

Academic Advising Office

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