Master of Science
Clinical Exercise Physiology
Benedictine University
The Master of Science (M.S.) in Clinical Exercise Physiology program is part of the Department of Biological Sciences at Benedictine University. The curriculum was developed with the input of an advisory committee composed of clinical exercise physiology practitioners and faculty, and in accordance with the guidelines designated by the American College of Sports Medicine. The program is based on the Benedictine philosophy of developing the whole person in mind, body, and spirit, and that the realization of human potential is based on an integration of the three components.

Graduates from this program can be found in a variety of leadership roles in many professional settings including hospitals, independent cardiac rehabilitation programs, health care agencies, schools, corporations and health clubs. In addition to professional preparation, the program also provides an excellent educational background for those who wish to pursue further study to become medical doctors, physician assistants, doctors of physical therapy or earn their Ph.D. in exercise physiology.

The M.S. in Clinical Exercise Physiology program uses a variety of teaching methods, including case studies in combination with laboratories, to better integrate academic information with practical application. It also requires two internships for further application of learned concepts in the workplace setting.

Students are introduced to the most recent information in the natural sciences through coursework in physiology, pathophysiology, biochemistry, pharmacology and nutrition. Courses in behavioral modification and preventative health care address the mental and spiritual aspects of better health. Additional coursework assists students in program development and administration, exposes students to specialized intergenerational needs, and addresses the ethics of research and health care administration.

Two clinical internships which offer students the opportunity to gain practical experience in the workplace are required. M.S. in Clinical Exercise Physiology internships are supervised by practicing professionals in the field who provide feedback on the student’s knowledge, skills and abilities as well as personal attributes that employers seek when making new hires.

Students gain expertise in numerous physiological assessment techniques through internships, research, community testing and Benedictine’s Young Hearts for Life screening program. Learning is also enhanced through collaborations with Benedictine’s Physical Education and athletic programs.

The Exercise Physiology Laboratory at Benedictine University allows students to assess the physiological responses to the stress of exercise. The fitness center in the Dan and Ada Rice Center is an additional resource for laboratory-based courses. Students also have the opportunity to provide exercise programming to a wide variety of older individuals at the Performance Enhancement Center at the Villa St. Benedict retirement facility.

Ongoing research opportunities are available in the Exercise Physiology Laboratory to allow students to participate in a variety of studies. The results of these studies are presented at both regional and national American College of Sports Medicine meetings and published in scientific journals.

The M.S. in Clinical Exercise Physiology program is academically demanding and prepares students for the critical responsibility they assume in professional practice. Students improve decision-making skills, learn to critically analyze the literature and demonstrate the ability to safely assess physiological performance of patients. Successful completion of the program requires that each student pass an academic and skills competency exam that is based on the knowledge and skills learned throughout their coursework.

Benedictine University’s Master of Science in Clinical Exercise Physiology program is a two-year, part-time evening program designed in accordance with the American College of Sports Medicine for certification as a Registered Clinical Exercise Physiologist (RCEP). Students develop the skills and qualifications to work in the prevention of cardiovascular, pulmonary and other lifestyle diseases such as obesity and diabetes. Students also receive extensive hands-on training in the rehabilitation of individuals who have experienced problems related to these diseases. The program is academically demanding and requires considerable commitment on the part of the student. If you are a highly motivated person who takes pride in building a sound scientific knowledge base about exercise physiology, we encourage you to contact us to arrange an appointment and tour our facilities.
Admissions Requirements/Prerequisites

Course Sequence

Successful completion of the M.S. in Clinical Exercise Physiology is conferred after passing an academic/competency skill exam offered as a part of Exercise Physiology Lab IV. Students are encouraged to take the American College of Sports Medicine (ACSM) Registered Clinical Exercise Physiologist (RCEP) certification exam after completion of the program. The recommended course sequence can be modified to the special needs of a student completing prerequisite classes in the first year.

Year One

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<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Fall</td>
<td>EXPH 521</td>
<td>Exercise Physiology Lab I – Fitness Testing</td>
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<tr>
<td></td>
<td>EXPH 560</td>
<td>Advanced Human Physiology</td>
<td>3</td>
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<tr>
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<td>EXPH 581</td>
<td>Professional Experiences in Clinical Physiology</td>
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<tr>
<td></td>
<td>EXPH 582</td>
<td>Advanced Exercise Physiology I</td>
<td>1</td>
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<tr>
<td>Spring</td>
<td>EXPH 522</td>
<td>Exercise Physiology Lab II – EKG</td>
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<tr>
<td></td>
<td>EXPH 561</td>
<td>Pathophysiology and Prevention</td>
<td>3</td>
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<tr>
<td></td>
<td>EXPH 591</td>
<td>Exercise Biochemistry and Metabolism</td>
<td>3</td>
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<td>Summer</td>
<td>EXPH 623</td>
<td>Exercise Physiology Lab III – Graded Exercise Testing</td>
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<tr>
<td></td>
<td>EXPH 681</td>
<td>Behavior Modification and Preventative Complementary Health Care</td>
<td>2</td>
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<tr>
<td></td>
<td>EXPH 685</td>
<td>Laboratory Ethics/Laboratory Procedures</td>
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Year Two

<table>
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<th>Term</th>
<th>Course Code</th>
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<tr>
<td>Fall</td>
<td>EXPH 662</td>
<td>Advanced Exercise Physiology II</td>
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<tr>
<td></td>
<td>EXPH 663</td>
<td>Exercise Pharmacology</td>
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<td>EXPH 690</td>
<td>Internship</td>
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<td>Spring</td>
<td>EXPH 664</td>
<td>Special Populations</td>
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<td></td>
<td>EXPH 690</td>
<td>Internship</td>
<td>2</td>
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<tr>
<td></td>
<td>NUTR 542</td>
<td>Applied Nutritional Physiology</td>
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<tr>
<td>Summer</td>
<td>EXPH 625</td>
<td>Exercise Physiology Lab IV – Comprehensive Exam</td>
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<tr>
<td></td>
<td>EXPH 686</td>
<td>Program Development and Administration</td>
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For a full list of application requirements, please visit ben.edu/GradApply.

Students must have earned an undergraduate degree from a regionally accredited university.

Students must have completed undergraduate courses in exercise physiology, biomechanics/kinesiology, statistics, general chemistry, biochemistry, nutrition, anatomy and physiology. A combined health science organic/biochemistry class may be substituted for biochemistry.

Applicants who may have outstanding prerequisite coursework are encouraged to apply during the fall. Certain prerequisite coursework needs to be completed prior to entering the program in order to follow the recommended course sequence shown below.

Applicants may be admitted on a conditional status if they have up to two prerequisites outstanding. Prerequisite courses may be taken at Benedictine University or at any accredited university.

Priority application consideration for work study and research awards will be given to students who apply by February 1 of each academic year.

All student applications submitted by the February 1 deadline will be notified by March 15 regarding acceptance status. Students may still apply after the February 1 deadline.

All acceptances will be based on a student’s qualifications, experience and incoming student space availability.

The Graduate Record Examination (GRE) is not required.

Applicants must submit a one-page essay discussing your education and career goals, and a personal or phone interview.

Two letters of recommendation are also required. One must address your academic potential (preferably from exercise physiology, physiology, or other science instructor) and the other must address your interpersonal skills and work ethic (from an employer or laboratory-based course).

In order to enhance the professional development of students, a degree completion requirement is membership in a professional society related to clinical exercise physiology and/or attendance at a regional or national meeting of one of those societies. A list of recognized societies may be obtained from the program website at ben.edu/MSCEP.

When graduate student Jennifer Zundel was looking for a challenging internship, her Clinical Exercise Physiology instructor recommended an organization that promotes physical activity for the disabled. That internship turned into a full-time job, and today Zundel is a recognized expert in the field, promoting healthy behaviors for people of all abilities.

Read the rest of Jennifer’s story at ben.edu/OurStories.
M.S. in Clinical Exercise Physiology Faculty

**Pedro Del Corral, Ph.D., M.D.**
Program Director, M.S. in Clinical Exercise Physiology
Ph.D., Exercise Physiology, 1997, University of Tennessee
M.D., 2003, American University of Integrative Sciences, Sint Maarten School of Medicine

**Regina Schurman, Ed.D., RCEP, CSCS, CPA**
Administrative Program Director and Student Internship Coordinator
M.S. in Clinical Exercise Physiology Program and Director, The Activities of Daily Living Performance Enhancement Research Center
Ed.D., Higher Education and Organizational Change, 2012, Benedictine University

Additional Full-Time Faculty

**Jayashree Sarathy, Ph.D.**
Assistant Professor
Ph.D., Physiology, 1999, University of Illinois at Chicago

Adjunct Faculty

**Jenna Eisenberg, D.C.**
Director
Rise and Shine Services
D.C., National University of Health Sciences

**Amie Luna, M.S., RCEP**
Adjunct Professor
Benedictine University
M.S., Clinical Exercise Physiology, Benedictine University

**Adam R. Marek, M.S., M.B.A.**
Ph.D. Candidate, Molecular Pharmacology and Therapeutics
Health Sciences Division, Loyola University Chicago

**Jeffrey D. Samburg, D.P.T., M.S., NASM-CES**
Physical Therapist, Cadence Health
Doctor of Physical Therapy, Midwestern University

**Brian Saso, M.S.**
Assistant Director, Cardiopulmonary
Adventist Bolingbrook Hospital
M.S., Clinical Exercise Physiology, Benedictine University

**Laurie Schubert, Ph.D., RD, LDN**
Adjunct Professor
Ph.D., Nutritional Sciences, University of Wisconsin-Madison

**Dave Zanghi, M.S., M.B.A., ATC/L, CSCS, FAACVPR**
Director Cardiodiagnostics, Wound Care and Cardiology Outreach Services, Edward Heart Hospital
M.S., Clinical Exercise Physiology, Benedictine University

Benedictine University is located in Lisle, Illinois, just 25 miles west of Chicago, and has branch campuses in Springfield, Illinois, and Mesa, Arizona. Founded as a Catholic university in 1887, Benedictine enrolls 10,058 students in 56 undergraduate and 20 graduate programs.

The Annual Security Report and Annual Fire Safety Report are available at ben.edu/police.

For more information, call the Enrollment Center at (630) 829-6300, email admissions@ben.edu or visit ben.edu.

Benedictine University • 5700 College Rd. • Lisle, IL 60532

Accredited by the Higher Learning Commission.

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