Master of Science in Clinical Exercise Physiology
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 practicing clinical exercise physiology professionals and in accordance with the guidelines designated by the American College of Sports Medicine. The program is based on the Benedictine philosophy that a person is spirit, mind and body, 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 at medical school or the doctorate level.

Program Overview

Benedictine University’s Master of Science in Clinical Exercise Physiology program is a two-year adult 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 interview and tour our facilities.

Program Curriculum

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 Human Physiology Laboratory at Benedictine University allows students to assess the physiological responses to the stress of exercise. The new fitness center in the Dan and Ada Rice Center is an additional resource for laboratory-based courses. Additional clinical and research opportunities are available at both the Activities of Daily Living Performance Enhancement Research Center at the Villa St. Benedict retirement facility as well as in the Human Physiology Laboratory at Benedictine University.

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.
Admissions/Prerequisites

When graduate student Jennifer Green was looking for a challenging internship, her Clinical Exercise Physiology instructor turned her on to an organization that promotes physical activity for the disabled. That internship turned into a full-time job, and today Green is fast becoming an expert in the field, promoting healthy behaviors for people of all abilities. Read the rest of Jennifer’s story at www.ben.edu/grow.

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. 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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<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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<tbody>
<tr>
<td>EXPH 521</td>
<td>EXPH 522</td>
<td>EXPH 623</td>
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<tr>
<td>Exercise Physiology Lab I – Fitness Testing</td>
<td>Exercise Physiology Lab II – EKG</td>
<td>Exercise Physiology Lab III – Graded Exercise Testing</td>
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<tr>
<td>EXPH 560</td>
<td>EXPH 561</td>
<td>EXPH 624</td>
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<tr>
<td>Advanced Cardiovascular and Respiratory Physiology</td>
<td>Cardiopulmonary Pathophysiology and Prevention</td>
<td>Exercise Physiology Lab IV – Comprehensive Exam</td>
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<td>EXPH 580</td>
<td>EXPH 591</td>
<td>EXPH 684</td>
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<tr>
<td>Current Topics in Exercise Physiology (Opportunity to finish prerequisites)</td>
<td>Exercise Biochemistry and Metabolism</td>
<td>Program Development and Administration</td>
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Year Two

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<th>Fall</th>
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<tr>
<td>EXPH 662 Advanced Exercise Physiology</td>
<td>EXPH 664 Special Populations</td>
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<td>EXPH 663 Exercise Pharmacology</td>
<td>EXPH 690 Internship</td>
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<td>EXPH 690 Internship</td>
<td>NUTR 542 Applied Nutritional Physiology</td>
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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 www.ben.edu/MSCEP.

- 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 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. Time is allotted the first semester of the program to take care of these needs.

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.

For a full list of application requirements, please visit www.ben.edu/GradApply. Among the requirements are a one-page essay discussing your education and career goals, and a personal or phone interview with the directors of the Clinical Exercise Physiology program. Two letters of recommendation are also required: one that can address your academic potential (from a science instructor) and one that can address your interpersonal skills and work ethic (from an employer).
M.S. in Clinical Exercise Physiology Faculty

Pedro Del Corral, Ph.D., M.D.
Academic Program Director, Clinical Exercise Physiology Program
Ph.D., Exercise Physiology, 1997, University of Tennessee
M.D., 2003, The University of Sint Eustatius School of Medicine

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

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

Adjunct Faculty

Philip DuPont, M.D., Ph.D.
Medical Research Director, The Human Physiology Lab
M.D., Universidad Autonoma de Ciudad Juarez
Ph.D., Cell Biology/Microbiology, Illinois Institute of Technology

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

Adjunct Faculty Continued

Karla Hanson, M.S.
Sr. Exercise Physiologist
The Center for Congenital and Structural Heart Disease at Rush University Medical Center
M.S., Clinical Exercise Physiology, Benedictine University

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

Adam Reimel, M.S., EMT-P
Research and Development Scientist
Gatorade Sports Science Institute
M.S., Clinical Exercise Physiology, Benedictine University

Jeffrey D. Samburg, DPT, M.S., NASM-CES
Physical Therapist
Cadence Health
M.S., Applied Exercise Physiology, University of Illinois at Chicago

Brian Saso, M.S.
Manager, Cardiac and Rehab Services
Adventist Bolingbrook Hospital
M.S., Clinical Exercise Physiology, Benedictine University

Laurie Schubert, Ph.D., RD, LDN
Adjunct Professor
Ph.D., Nutritional Sciences, 2002, University of Wisconsin-Madison

Dave Zanghi, M.S., M.B.A., ATC/L, CSCS, FAAVPR
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 in 1887, Benedictine provides 55 undergraduate majors and 17 graduate and four doctoral programs. Forbes magazine named Benedictine among “America’s Top Colleges” for the third consecutive year in 2013. Benedictine University’s Master of Business Administration (M.B.A.) program is listed by Crain's Chicago Business as the fifth largest in the Chicago area in 2013.

For more information, call the Enrollment Center at (630) 829-8300, email admissions@ben.edu or visit www.ben.edu.

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