

### **Executive Master of Science (M.S.) in Values-Driven Leadership**

College: College of Business

**Department:** Center for Values-Driven Leadership

**Student Type:** Graduate

#### Faculty:

James D. Ludema, Ph.D.

#### **Lecturers:**

Shannon Brown, Ph.D.
José DelaCerda-Gastelum, Ph.D.
Marie E. Di Virgilio, Ph.D., M.B.A.
James (Gus) Gustafson, Ph.D.
Michael Kuppinger, Ph.D.
Michele Major, Ph.D.
David Smith, Ph.D.
Tina Huesing, Ph.D.

The lecturers listed have extensive experience in the business, non-profit, government, or military sectors, and they hold a Ph.D. or D.B.A. in Values-Driven Leadership or Organization Development. Benedictine University is fortunate to have these extraordinary individuals teach in the Executive Master of Science in Values-Driven Leadership program.

#### **Mission Statement:**

The Executive Master of Science in Values-Driven Leadership program graduates exceptional values-driven leaders with the personal, interpersonal and strategic organizational competencies needed to make a transformative impact on business and society.

#### **Program Learning Outcomes:**

The Executive Master of Science in Values-Driven Leadership program has six key learning outcomes. Graduates will be able to:

- 1. Understand, apply and evaluate the theory and practice of values-driven leadership at the individual, team, organizational and societal levels.
- 2. Create and implement customized personal coaching plans for others to improve individual, team and organizational performance.
- 3. Develop and lead effective organizational change initiatives that apply the principles of values-driven leadership, nurture innovation and improve organizational performance.
- 4. Demonstrate mastery-level competence in values-driven leadership by analyzing strategic leadership problems and opportunities, and designing and defending comprehensive solutions that benefit both business and society.
- 5. Contribute to active and informed global corporate citizenship by understanding and evaluating the current global context, and by developing and demonstrating global leadership competencies.



6. Advance career objectives by developing new professional networks and assembling a portfolio of knowledge, skills, competencies and experiences that demonstrate proficiency in values-driven leadership and are attractive to current and potential employers.

#### What Makes the Program Unique?

The Executive Master of Science in Values-Driven Leadership program is benchmarked against the best leadership development programs in the world and incorporates many of their most powerful features. First, it expertly blends theory and practice. It will help you develop as a values-driven leader with the capacity to lead with excellence at the individual, team, organizational and societal levels. Second, its format is tailored to meet the needs of busy executives like you. It is a cohortbased, blended-format program with interactive online courses and three, four-day residencies to provide networking opportunities and to integrate and deepen the learning experience. The first and second residencies are held on Benedictine University's Lisle, Ill. campus. The third residency is held at ITESO University in Guadalajara, Mexico. Third, the program is accelerated. It is designed to be completed in 18 months or less. Fourth, during the first 12 months of the program, you will create a personalized leadership development plan and will receive individualized executive coaching to help you implement the plan and pursue your career objectives. Fifth, based on your interests and goals, you will design and conduct action-learning projects to address problems and opportunities in your organization under the guidance of an instructor. These projects will deliver immediate value to you and to your organization. Sixth, a values-driven approach to business runs throughout the program and equips you to have a transformative impact on business and society.

#### The Executive Master of Science in Values-Driven Leadership Curriculum:

The curriculum consists of 16, four quarter credit hour courses, totaling 64 quarter credit hours. Students must maintain a 3.0 or better grade point average to graduate. Any course where students earn a grade below "C", must be repeated. Because the program is designed to be completed in 18 months or less, a new course starts every six weeks, and each residency has two courses. Residencies one and two, held on Benedictine's Lisle, Ill. campus, run Thursday 9:00 a.m. – 5:00 p.m., Friday 8:00 a.m. – 5:00 p.m., Saturday 8:00 a.m. – 5:00 p.m., and Sunday 8:00 a.m. – 4:00 p.m. Residency three, held on ITESO's Guadalajara, Mexico campus, runs 8:00 a.m. – 5:00 p.m. Monday – Saturday.

#### **Transfer Credit and Course Waivers:**

All courses in the Executive Master of Science in Values-Driven Leadership program are unique core courses, and we do not accept transfer credit or course waivers.

#### **Admission Requirements:**

- Application for graduate admission
- \$40 non-refundable application fee
- Official transcripts from all universities/colleges attended. Official electronic transcripts can be emailed to <a href="mailto:nationalenrollment@ben.edu">nationalenrollment@ben.edu</a>
- Two letters of reference from individuals familiar with the applicant's professional or academic work, excluding family or personal friends
- A one-to two-page essay addressing educational and career goals
- Current résumé listing chronological work history
- Personal interview may be required prior to an admission decision



- Students who have completed any foreign postsecondary education (college, university, etc.) are
  required to submit an official credit evaluation. Students may submit a detailed evaluation from
  Educational Perspectives at edperspectives.org/Benedictine or a course-by-course evaluation
  from Education Credential Evaluators (ECE) at ece.org. Official reports must be mailed directly to
  Benedictine from Educational Perspectives or ECE or submitted electronically directly to
  Benedictine from Educational Perspectives or ECE. Please contact the Enrollment Center for
  more information.
- For international students, Test of English as a Foreign Language (TOEFL)/International English Language Testing System (IELTS) of 550 (paper-based) or 79 (Internet-based) and 6.0 IELTS.

#### **Courses:**

**EMSVDL 600 Your Leadership Journey.** This blended-format course: (1) builds strong working relationships among cohort members, (2) provides an initial introduction to leadership concepts and practice, and (3) allows cohort members to strengthen their leadership vision and capacity by identifying and leveraging their unique strengths. Students will be introduced to the field of leadership, complete a series of assessments and personal development activities to help clarify their leadership vision and strengthen their leadership capacity, and engage in activities to build a cohesive cohort. 4 quarter credit hours.

**EMSVDL 605 Your Leadership Impact.** This blended-format course focuses on students' current and near-future leadership contributions from a career perspective. It will provide ample reflection time for the students to think about and articulate what leadership means to them in the context of serving others and will provide a model, framework and action plan for identifying the compelling impact that they wish to make in the five roles of values-driven leaders in the near future. 4 quarter credit hours.

**EMSVDL 610 Leadership Theory & Practice.** This online course serves as the foundation for developing the practice of leadership. Students will learn and apply major theories and practical models of leadership to real-world situations. Emphasis is placed on how theory can be used to improve practice. Students will explore their personal leadership style using assessment instruments and reflective exercises. Practical application projects will allow students to develop their personal leadership theory. 4 quarter credit hours.

**EMSVDL 615 Moral & Ethical Foundations of Leadership.** This online course explores social, moral, and ethical concepts related to business leadership. Students relate these concepts to their own purpose, values, and commitments as leaders, their approach to leading and enriching the lives of others, and the role they play in shaping the vision, mission, priorities, and strategies of their organizations. 4 quarter credit hours.

**EMSVDL 620 Leading Teams.** Most organizations use team-based approaches to leverage the strengths and maximize the productivity of workers to achieve team and organizational goals. In this online course, students learn about the characteristics, structures, culture, and dynamics of teams, and are introduced to series of team assessment tools. Students use these tools to assess a team within their organization and make appropriate recommendations for improvement. Students will



also learn the essentials of meeting management and use how to use meetings effectively. 4 quarter credit hours.

**EMSVDL 625 Leading Change & Innovation.** By definition, effective leadership involves leading organizational change and nurturing innovation. This online course examines the paradigms, concepts, and practices that support successful change and innovation. Students will learn practical steps for leading change and addressing innovation challenges facing their organizations, and the develop skills to infuse a culture of innovation within their organizations to drive sustainable growth. 4 quarter credit hours.

**EMSVDL 630 Leading & Developing Others.** In this blended-format course, students learn how to interact with employees to ensure improved performance throughout the lifecycle of employment. Students will sharpen their skills in building rapport, trust, and respect; listening and understanding; and managing crucial conversations. This course is designed to help students: 1) enhance their coaching and mentor skills; 2) identify strategies that develop the skills of their direct reports; 3) improve their ability to successfully engage in critical coaching conversations. 4 quarter credit hours.

**EMSVDL 635 Leading Appreciative Inquiry.** This highly experiential, blended-format course focuses on the concepts, principles, and practice of Appreciative Inquiry (AI), a positive approach to organizational change. Students will be able to plan and lead an AI Summit, and appreciate the value of building upon the good things that exist in organizations. 4 quarter credit hours.

**EMSVDL 640 Organizational Leadership Practicum.** For this online independent study course, students design, plan, and conduct a comprehensive research project investigating a problem or an opportunity in an organizational setting under the guidance of the instructor. Although individualized, students share their work with each other. 4 quarter credit hours.

**EMSVDL 645 Strategic Leadership.** This online course focuses on the role of leaders in developing and executing business strategy. It examines historical and contemporary approaches, and the underlying concepts that support them. Emphasis is placed on the challenges and opportunities of developing strategy for sustainable value creation. Students will become familiar with the CVDL Operating Framework and utilize as a tool in evaluating their own organization's strengths and opportunity areas. 4 quarter credit hours.

**EMSVDL 650 Organizational Behavior.** Organizational Behavior (OB) is the study of how the behavior of individuals and groups impact the organization. It focuses on better understanding of human behavior in order to improve productivity and quality. It also assists in developing methods to empower people as well as to design and implement change programs. OB offers insights into rapid change, globalization, and diversity while providing guidance for managers in creating an ethically healthy work climate. This online course teaches both theory and the practical application of OB in organizations in an effort to help students better explain, predict, and influence behavior. 4 quarter credit hours.

**EMSVDL 655 Business Decision Making.** Decisions and the process of decision making are fundamental to all management processes. This online course takes students through a decision-making process with values at its core. Students will assess their own decision-making skills, and



learn how to use creative processes to identify decision problems, create alternatives, and articulate objectives. 4 quarter credit hours.

**EMSVDL 660 Responsible Leadership.** Using the lens of sustainability, this online course examines the qualities of responsible leadership from both a theoretical and practical perspective. The three pillars of sustainability; environment, economy, and social equity, serve as an integrated framework as we explore how critical thinking, systems thinking, and thoughtful stewardship shape responsible leaders. 4 quarter credit hours.

**EMSVDL 665 Global Leadership.** This online course focuses on enhancing global leadership competencies, beginning with core concepts and personal assessments, and concluding with a global leadership development project proposal where students demonstrate their ability to move from concept to practice. 4 quarter credit hours.

**EMSVDL 670 International Exchange.** In partnership with universities in other countries, this blended-format course provides students with an opportunity to broaden program learnings by exposing them to scholars, and business and local community leaders from other countries. Students engage in dynamic learning activities during this intensive course. 4 quarter credit hours.

**EMSVDL 675 Leadership Legacy Capstone.** This blended-format capstone course provides students with an opportunity to synthesize what they have learned about values-driven leadership during their graduate degree program and to demonstrate mastery of primary leadership competencies, concepts, principles and practices. Students will complete an in-depth case analysis to demonstrate their competence in identification, analysis and solution of leadership problems in organizations and society today utilizing their own unique leadership-point-of-view as their guide. Students will also develop a Legacy Tree – based on the VDL Leader Competency Model – that will capture the essence of their life purpose. 4 quarter credit hours.

### Master of Science (M.S.) in Integrative Physiology

College: College of Science

**Department:** Biological Sciences

Student Type: Graduate

#### **Faculty:**

Jayashree Sarathy, Ph.D.
Program Director,
Integrative Physiology Program,
Assistant Professor, Department of Biological Sciences
Ph.D., Physiology, University of Illinois at Chicago (1999)

# Benedictine University®

Allison K. Wilson, Ph.D.

Professor, Department of Biological Sciences

Ph.D., Physiology and Biophysics, University of Illinois at Chicago (1990)

Ian Hall, Ph. D.

Assistant Professor, Department of Biological Sciences

Ph. D., Biology, Indiana University Bloomington (2010)

Robin Rylaarsdam, Ph. D.

Professor, Department of Biological Sciences

Ph.D., Northwestern University (1997)

Robert McCarthy, Ph.D.

Assistant Professor, Department of Biological Sciences

Ph.D., Hominid Paleobiology, George Washington University (2004)

Pedro Del Corral, Ph.D., M.D.

Assistant Professor, Department of Biological Sciences

Ph.D., Exercise Physiology, University of Tennessee, Knoxville (1997)

Preston Aldrich, Ph.D.

Professor, Department of Biological Sciences

Ph.D., University of Georgia, Athens (1997)

LeeAnn Smith, Ph. D.

Associate Professor, Department of Biological Sciences

Ph.D., University of Connecticut Health Center (2004)

Monica Tischler, Ph. D.

Professor, Department of Biological Sciences

Ph.D., Cornell University (1987)

David M. Rubush, Ph. D.

Assistant Professor, Department of Chemistry

Ph.D. Chemistry, Colorado State University (2012)

Ed Ferroni, Ph. D.

Professor, Department of Chemistry

Ph.D. Chemistry, Indiana University School of Medicine (1983)

Dr. Patrick Flynn, Ph. D.

Professor, Department of History, Philosophy and Religious studies

Ph.D. (Philosophy of Science), University of Western Ontario | 1989

#### Lecturers

Tiara Perez-Morales, Ph. D.

Amy Hebert, Ph.D

The information contained on this page is from the 2016-2017 Graduate Catalog and is valid until August 1, 2017.



Lecturers are specifically chosen to teach classes in their respective fields of expertise. The lecturers listed are individuals who have been employed as instructors on an as-needed basis, within the last several years, to teach courses at Benedictine University. Instructors listed may not currently be employed by Benedictine University. The University is fortunate to be able to provide our students with part-time faculty whose experience, credentials and commitment to education add to the high quality of our resident faculty.

#### Introduction:

Benedictine University's Master of Science in Integrative Physiology program is a one year graduate degree program with a full-time curriculum designed for graduates of bachelor's program in Biology and other related sciences. The program serves students who want to deepen their understanding of physiology and explore various areas of biology by providing a one-year, rigorous course of study culminating in a Master's degree. It is aimed to provide valuable and marketable experience to students who are taking a "gap" year after graduation. The program also serves students interested in applying to doctoral programs in biomedical research. Students with diverse interests are encourages to apply and will be provided with the right tools and a meaningful path to succeed in their future endeavors.

#### **Program Overview:**

The M. S. in Integrative Physiology program is part of the Department of Biological Sciences, College of Science. The curriculum will provide students a chance to show their abilities in advanced coursework and help students identify a focus for their graduate and doctoral degrees.

The proposed program is centrally related to the Mission Statement of the institution: "Benedictine University is a Values-centered liberal arts college enriched by our excellence in science." The expansion of science offerings with this non-thesis Master's program in biological sciences further develops students in their preparation to serve society through work in health care.

In this program, students will develop:

- Broad Knowledge of Science
   Students strengthen and deepen their knowledge of physiology and other biology subdisciplines through challenging and stimulating coursework.
- Ethical Values
   Graduate level coursework in bioethics presents students with practice and guidance as they struggle with the moral issues in present day health care.
- Communication Skills
   Students develop clear and concise verbal and written communication with multiple presentations and assignments. The curriculum fosters active classroom discussions to develop critical thinking and problem-solving skills.

This is a full-time, 30 credit curriculum starting in Fall and ending in Spring semester, with the aim to help students prepare for graduate program entrance exams and interviews. Students must maintain a B average to successfully complete the program.



#### **Integrative Physiology Recommended Course sequence:**

#### Semester 1

#### **Core Courses:**

INPH 540: Advanced Integrative Human Physiology I \* (3)

INPH 503: Ethical and Political issues in Health Care (CL MPH 603) (3)

INPH 520: Great Ideas in Physiology (2)

# Electives – Choose two of the following courses (Cross-listed with 300 level Biology and Health Science electives)

INPH 523 Biophysics (CL BIOL 323) (3)

INPH 544/545/546 Gross Anatomy (CL BIOL 344/345/346) (3)

INPH 554 Immunology (CL BIOL 354) (3)

INPH 555 Molecular Pharmacology (CL BIOL 365) (3)

INPH 571 Molecular Biology (CL BIOL371) (3)

INPH 576 Neurophysiology (CL BIOL 376) (3)

INPH 591: Special topics as appropriate [Microbiome and Health](CL BIOL 391) (3)

#### Semester 2

#### **Core Courses:**

INPH 550: Advanced Integrative Human Physiology II\* (3)

INPH 565: Advanced Biochemistry and Metabolism (CL BCHM 365) (3)

INPH 590: Comprehensive Exam (1)

# Electives: Choose 3 from following courses (Cross-listed with 300 level Biology and Health Science electives)

INPH 525 Biology of Complex Systems (CL BIOL 325) (3)

INPH 544/545/546 Gross Anatomy (CL BIOL 344/345/346) (3)

INPH 547 Medicinal Chemistry (CL BIOL 347/CHEM347) (3)

INPH 558 Exercise Physiology (CL BIOL 358/HLSC 358/EXPH 500) (3)

INPH 559 Pathophysiology (CL BIOL 359) (3)

INPH 560 Endocrinology (CL BIOL 360) (3)

INPH 568 Biomechanics (CL BIOL 368) (3)

INPH 569 Neurobiology (CL BIOL 369) (3)

INPH 572 Genomics and Bioinformatics (CL BIOL 372) (3)

INPH 591: Special topics as appropriate (CL BIOL 391) (3)

INPH 600: Professional Insights into Health Care (3)

#### Total Number of Credit Hours: 14 + 16 = 30

<sup>\*</sup> These courses are designated as foundational, which means, a "B" or better is required to meet degree requirements.



#### **Courses:**

**INPH 503 Ethical and Political Issues in Health Care.** Applies basic principles of ethical analysis (e.g. Public Health Code of Ethics, human rights framework, other moral theories) to issues of public health practice and policy. Cross listed with NUTR 383 and MPH 503. 3 quarter credit hours. Typically offered: Fall, Winter and Spring Terms.

**INPH 520 Great Ideas in Physiology.** A study in the original articles from some of the great physiologists to understand basic concepts and current writings on advances in the field of physiology. Students are exposed to original research publications from various physiological systems. 2 semester credit hours. Typically offered: Fall Term.

**INPH 523 Biophysics.** This course provides a calculus-based introduction to biophysics and physiological modeling. The course is an integrated lecture and computer lab experience that focuses on scientific modeling and hypothesis testing. Topics covered will be selected from: single molecule biophysics, ion channel permeation and the action potential; osmosis, gastrointestinal and renal functioning; statistical thermodynamics and the second law; free energy transduction, passive transporters and active pumps; hemoglobin, oxygen transport and metabolism. Cross-listed as BIOL/CHEM/PHYS 323. 3 semester credit hours. Typically offered: Fall Term.

**INPH 525 Biology of Complex Systems.** Survey of emergent and organizing principles in complex biological systems modeled as networks. Topics include genome and cellular interaction networks, anatomical networks such as brain and cardiovascular systems, social, linguistic, cultural, and technological networks, and ecological networks. Graph theory and computer software are used to visualize and analyze system properties. Cross-listed with BIOL 325.3 semester credit hours. Typically offered: Periodically.

**INPH 540 Advanced Integrative Human Physiology I.** Lectures and conferences in human physiology I; a thorough study of the normal functioning of neuro-muscular, cardiovascular/circulatory and respiratory systems. Emphasis is placed on integrative nature of physiology, highlighting the molecular and cellular basis behind normal functions. 3 semester credit hours. Typically offered: Fall Term.

**INPH 544 Gross Anatomy: Dissection of the Human Cadaver.** Cross-listed with BIOL 344. 3 semester credit hours. Typically offered: Periodically.

**INPH 545 Gross Dissect Anatomy II: Head and Neck.** Cross-listed with BIOL 345. 3 semester credit hours. Typically offered: Periodically.

**INPH 546 Gross Dissect Anatomy III: Lower Body.** Cross-listed with BIOL 346. 3 semester credit hours. Typically offered: Periodically.

**INPH 547 Medicinal Chemistry.** Application of the skills and knowledge acquired in Organic Chemistry to drugs and their interactions with biological systems. This course provides an understanding of pharmacodynamics, pharmacokinetics, drug targets (receptors, enzymes, etc.),



various drug types and the drug discovery/design/development process. Cross-listed with BIOL/CHEM 347. 3 semester hours. Typically offered: Periodically.

**INPH 550 Advanced Integrative Human Physiology II.** A thorough study of the normal functioning of immune, urinary, digestive, endocrine and reproductive systems. Emphasis is placed on integrative nature of physiology, highlighting the molecular and cellular basis behind normal functions. 3 semester credit hours. Typically offered: Spring Term.

**INPH 554 Immunology.** Includes structural and functional components of the immune system, as well as types and control of immune response. Cross-listed with BIOL 354. 3 semester credit hours. Typically offered: Spring Term.

**INPH 555 Molecular Pharmacology.** A course introducing students to the molecular foundations of drug action with an emphasis on molecular structure-function relationships. Includes receptor-ligand interactions, agonists and antagonists, and signal transduction pathways. Completing a 200 level Biochemistry course prior to this class is recommended. Cross-listed with BIOL 365. 3 semester credit hours. Typically offered: Periodically.

**INPH 558 Exercise Physiology.** Provides an in-depth overview of how the body's physiological, hormonal and biochemical systems acutely and chronically respond to various forms of physical activity and environmental conditions in untrained and trained individuals. Cross-listed as BIOL 358/EXPH 500. 3 semester credit hours. Typically offered: Fall, Spring and Summer Terms.

**INPH 559 Pathophysiology.** Integrates the pathological processes of human disease with those of the normal functioning body. Cellular and organismal disease mechanisms are studied with reference to specific diseases, with opportunity to apply this learning to actual case studies. Cross-listed with BIOL 359. 3 semester credit hours. Typically offered: Periodically.

**INPH 560 Endocrinology.** A detailed study of the structure and function of the endocrine system. Cross-listed with BIOL 360. 3 semester credit hours. Typically offered: Spring Term.

**INPH 565 Advanced Biochemistry and Metabolism.** The major metabolic pathways and cellular bioenergetics are discussed. An emphasis is placed upon the chemistry of these processes. Completing a 300 level Biochemistry course prior to this class is recommended. Cross-listed with BCHM 365. 3 semester credit hours. Typically offered: Spring Term.

**INPH 568 Biomechanics.** Principles from the fields of physics, engineering, anatomy and physiology are used to analyze motion of the human body and to describe the forces acting upon the various body segments during normal daily activities. Cross-listed as BIOL 368/EXPH 568. 3 semester credit hours. Typically offered: Spring Term.

**INPH 569 Neurobiology.** Introduction to the nervous system including the human brain and its specialized functions. Topics covered include pathophysiology of the brain, how and why psychotic and other drugs affect the nervous system, and how and why memories are formed. Cross-listed with BIOL 369. 3 semester credit hours. Typically offered: Spring Term.



**INPH 571 Molecular Biology.** An advanced study of mechanisms controlling gene and genome organization, expression, regulation and evolution. Includes viral, prokaryotic, and eukaryotic systems. Exposure to fundamental bioinformatics and Python programming, and readings from the primary literature. Cross-listed with BIOL 371. 3 semester credit hours. Typically offered: Fall Term.

**INPH 572 Genomics and Bioinformatics.** A survey of the fields of genomics, proteomics, and metabolomics, and systems biology with an emphasis on using bioinformatics resources and understanding the computational and mathematical basis behind many of the tools used for data mining and analysis. Student project involves Python programming. Cross-listed with BIOL 372. 2 semester credit hours. Typically offered: Spring Term.

**INPH 576 Neurophysiology.** Introduction to the function of nervous systems at the molecular, cellular, and network level. Topics will include the electrical properties of excitable cells, cell-to-cell communication in the nervous system, and network level processing and modulation of neural circuits. Special attention will be paid to current and developing techniques in the field. Cross-listed with BIOL 376. 3 semester credit hours. Typically offered: Fall Term.

**INPH 590 Comprehensive Exam.** Comprehensive exam is designed to assess the depth and breadth of understanding, synthesis and integration of knowledge, written and oral communications skills of the students acquired through the program. All program class course work must be completed. Pass/fail. 1 semester credit hour. Typically offered: Spring Term.

**INPH 591 Special Topics.** Special courses on various topics with which the student has not become acquainted in formal course work. May be an extension of or a supplement to material previously encountered, or lectures from a completely new area. Cross-listed as BIOL 391.

**INPH 600 Professional Insights into Health Care.** The Practicum provides 75 hours of observation for a specific health care career, along with structured readings and written reflections. The observation is in a variety of clinical sites and/or private practice offices. Students have unique opportunity to be exposed to current advances in therapeutics, including stem cell research. 3 semester credit hours. Typically offered: Spring Term.