

# PARKINSON SCHOOL OF HEALTH SCIENCES AND PUBLIC HEALTH

Loyola University Chicago's Parkinson School of Health Sciences and Public Health brings together our call as a Jesuit institution to go to the frontiers of education, research, and practice, and help people who live at the margins.

An established leader in health care education with the Stritch School of Medicine and the Marcella Niehoff School of Nursing, the Parkinson School of Health Sciences and Public Health draws on those strengths to address today's public health challenges and train the next generation of experts in public health, health systems and informatics, dietetics, exercise science, and medical laboratory science.

Flexible degree programs as well as certificates in applied health sciences, health informatics and data science, health care administration, and public health meet student, community, and industry needs. The Parkinson School includes programs for undergraduate and graduate students, as well as career professionals who seek additional skills or a career change. Innovative and accessible program formats for adult learners along with traditional undergraduates include online instruction and hybrid learning programs on Loyola's Health Sciences Campus and Lakeshore campuses. Insight into the student experience (<https://www.luc.edu/features/stories/parkinson/>).

## Undergraduate Programs

- Environmental Science/Public Health (BS/MPH) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/environmental-science-public-health-bs-mph/>)
- Environmental Science: Environmental Health/Public Health (BS/MPH) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/environmental-science-environmental-health-public-health-bs-mph/>)
- Exercise Science (BS) (<https://catalog.luc.edu/undergraduate/health-sciences-public-health/exercise-science-bs/>)
- Exercise Science (BS/MS) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/exercise-science-bsms/>)
- Healthcare Administration (BS) (<https://catalog.luc.edu/undergraduate/health-sciences-public-health/healthcare-administration-bs/>)
- Healthcare Administration (BS/MHA) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/healthcare-administration-bs-mha/>)
- Healthcare Administration Minor (<https://catalog.luc.edu/undergraduate/health-sciences-public-health/healthcare-administration-minor/>)
- Healthcare Administration/Business (BS/MBA) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/healthcare-administration-business-bs-mba/>)
- Healthcare Administration/Public Health (BS/MPH) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/healthcare-administration-public-health-bsmph/>)
- Nutrition Minor (<https://catalog.luc.edu/undergraduate/health-sciences-public-health/nutrition-minor/>)

- Public Health (BS) (<https://catalog.luc.edu/undergraduate/health-sciences-public-health/public-health-bs/>)
- Public Health (BS/MPH) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/public-health-bsmph/>)

## Parkinson School of Health Sciences and Public Health Policies

Each student is required to abide by Loyola University Chicago policies in addition to Parkinson School of Health Sciences and Public Health policies. Loyola policies for undergraduate students may be found in the University Catalog. Parkinson School handbooks and policies are listed below:

- Parkinson Undergraduate Student Handbook 2022-2023 (<https://www.luc.edu/media/lucedu/parkinson/departments/publichealthsciences/Parkinson%20Undergraduate%20Student%20Handbook%202022-2023.pdf>)
- Healthcare Administration Handbook 2022-2023 (<https://www.luc.edu/media/lucedu/parkinson/departments/publichealthsciences/Healthcare%20Administration%20Handbook%202022-2023.pdf>)
- Exercise Science Handbook 2022-2023 (<https://www.luc.edu/media/lucedu/parkinson/departments/publichealthsciences/Exercise%20Science%20Handbook%202022-2023.pdf>)
- Internal Transfer Application ([https://www.luc.edu/media/lucedu/parkinson/departments/publichealthsciences/Internal\\_Transfer\\_Application\\_19-20.pdf](https://www.luc.edu/media/lucedu/parkinson/departments/publichealthsciences/Internal_Transfer_Application_19-20.pdf))

## Undergraduate Policies and Procedures

Please see Undergraduate Policies and Procedures (<https://catalog.luc.edu/undergraduate-academic-standards-regulations/>) for academic policies that supersede those of academic units within the University.

## University Policies

Please see University Policies for academic policies that supersede those of academic units within the University

## Exercise Physiology (EXCM)

### EXCM 101 Introduction to Exercise Physiology (3 Credit Hours)

Introduction to the major; also includes a lab component covering Emergency Procedures and Safety Skills, introduction to common safety principles, predisposing factors and common causes of accidents, injuries and illnesses.

This course satisfies the Engaged Learning requirement.

### EXCM 115 NCCA Personal Training Elective (1 Credit Hour)

This course encompasses an overview of key Exercise Science, training methodology and health behavior change principles. Students will then apply each principle into practice through screening and evaluation, exercise program design, and ethical, legal and professional responsibilities and guidelines.

#### Outcomes:

Upon successful completion of the course, the student will be able to: Apply key exercise science, training methodology and health behavior change principles in context to the provision of exercise; Apply the practice of exercise and fitness screening and assessment, health appraisal and risk stratification, while simultaneously integrating ethical considerations and client preferences

**EXCM 117 NCCA Group Fitness (1 Credit Hour)**

This course encompasses an overview of group exercise; to include cardiovascular exercise, strength training and stretching. Students will learn how to lead, instruct and motivate individuals or groups in exercise activities.

*Outcomes:*

Upon successful completion of the course, the student will be able to: Apply effective, exercise science-based group sessions for different fitness levels; Explain proper technique, demonstrate exercise, and teach appropriate methods to strengthen and stretch certain muscles

**EXCM 170 Women's Health and Exercise (1 Credit Hour)**

This course presents perspectives on physical activity and exercise science specific to women. It will include the identification of issues during various stages of development in the female body and barriers and benefits of exercise unique to women. Students will apply these perspectives to exercise program design and health care interactions with all clients.

*Outcomes:*

1) Understand the unique circumstances and outcomes of working with women in the field of wellness and fitness; 2) Identify preventative strategies (such as exercise prescription and nutrition guidance) that can compensate for health risks, issues, and deficiencies that female clients and patients may experience throughout their life; 3) Explain exercise modifications and varied benefits during specific periods in a woman's life (adolescents, pregnancy, postpartum, menopause)

**EXCM 201 Physiology of Exercise (4 Credit Hours)**

*Pre-requisites:* EXCM 101 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

The physiological functions of the body and the effect of exercise on these functions.

**EXCM 210 Program Design in Exercise (2 Credit Hours)**

*Pre-requisites:* EXCM 201

This course focuses on the design, implementation and evaluation of exercise programs through case-based application and classroom activities. Health-related components of fitness and fitness assessments are reviewed. Individual and group exercise program designs within community-based settings for individuals through the life cycle are discussed. Evidence-based content is identified to critically analyze and develop conditioning programs and techniques for a broad range of sports and activities. Important elements of program design are used to emphasize desired client program outcomes.

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Lead designed group exercises and activities which consider individual needs and differences; 2) Apply training principles and program variables to increase strength, endurance, power, or hypertrophy for the identified client or population; 3) Evaluate the designed exercise prescribed over time for an individual and/ special population; 4) Integrate cognate materials necessary to support the full development of physical performance including nutrition, environment, mobility, clothing and equipment; 5) Design individualized exercise programs for individuals and special groups; 6) Adjust exercise programs based on individual performance and safety considerations

**EXCM 301 Advanced Physiology of Exercise (3 Credit Hours)**

*Pre-requisites:* EXCM 201 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

An advanced course in exercise physiology covering exercise metabolism, temperature regulation and fluid balance.

**EXCM 342 Physical Growth, Development and Nutrition (3 Credit Hours)**

*Pre-requisites:* EXCM 101

A survey of the various components involved in personal health and wellness, such as personal fitness, sexuality, mental health, and environmental health as related to the stages of life development.

**EXCM 345 Therapeutic Exercise and Rehabilitation (3 Credit Hours)**

*Pre-requisites:* (EXCM 101 & 201) and (BIOL 243 or GNUR 156 & 156L)

Explanation and demonstration of the use of therapeutic modalities in the healing process. This will include discussion of the use of therapeutic modalities to enhance the rehabilitation process after athletic injury.

**EXCM 350 Sports Nutrition (3 Credit Hours)**

*Pre-requisites:* EXCM 201, CHEM 102 & CHEM 112

This course introduces the essentials of human nutrition for health and emphasizes the roles of key nutrients for athletic performance. This foundational material will be applied to athletic performance including adaptation and recommendations for training and competition. Nutrient recommendations will be reviewed for specific types of sports, exercise and other athletic concerns. The metabolic basis for sports nutrition recommendations is examined.

**EXCM 352 Musculoskeletal Assessment and Strength Training (4 Credit Hours)**

*Pre-requisites:* EXCM 201 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

This course will present the general principal and foundational skills for each component of the injury examination. These general principles will be applied to the recognition and examination of injuries/conditions specific to each body region. Address general medical conditions will likely encounter with patients.

**EXCM 364 Intro to Clinical Exercise Testing and Prescription (3 Credit Hours)**

*Pre-requisites:* EXCM 201 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

This class summarizes recommended procedures, including EKG and other stress testing modalities, for exercise testing and exercise prescription in healthy and diseased individuals.

**EXCM 368 Advanced Clinical Testing and Prescriptions (3 Credit Hours)**

*Pre-requisites:* EXCM 201 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

This course focuses on physiological implications of metabolic conditions such as diabetes, cardiac and pulmonary disease on exercise. The course includes modifications to exercise testing and in-depth preparation for exercise prescription based on diseases and special conditions. The course reviews contraindications and considerations for exercise, EKG interpretation and implications of physiological responses to exercise. Behavioral strategies to implement in client exercise planning and education are addressed. Exercise prescription is discussed as part of the ongoing evaluation of client performance.

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Create patient/client focused exercise programs, with modifications and progressive programming based on physiologic alterations; 2) Understand the effect of exercise on the physiological systems of the body and disease states; 3) Analyze exercise testing data from healthy individuals and individuals with physiological alterations; 4) Evaluate EKG responses to exercise; 5) Implement testing protocols and modifications for individuals with physiological alterations; 6) Understand acute responses and chronic adaptations to exercise and the impact on individuals with physiological adaptations

**EXCM 375 Special Populations in Exercise Science (2 Credit Hours)**

*Pre-requisites:* EXCM 201 and EXCM 364

This course provides practical information on exercise for persons with a wide range of health conditions, diseases and disabilities. Best-practice exercise prescription protocols for individuals across the life span will be addressed. An overview of unique physiology, effects of the condition on the exercise response, and effects of exercise training on the condition will be discussed. Recommendations for exercise testing and programming are presented for select populations.

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Understand the relations between health conditions, disease, disability and physical activity; 2) Establish physical activity outcomes in individuals with health conditions, diseases or disabilities; 3) Modify existing physical activity prescriptions to match individual capabilities and needs; 4) Demonstrate an understanding of the risks and benefits associated with exercise participation; 5) Analyze the results of exercise tests and fitness evaluations in various populations; 6) Modify equipment arrangement and facility resources to accommodate use by individuals with special needs

**EXCM 382 Clinical Research: Methods, Design and Ethics w/Lab (3 Credit Hours)**

*Pre-requisites:* EXCM 201 and STAT 103

Study of current literature with implications for exercise and sport science specializations; use of library resources and retrieval systems; evaluation of professional competencies.

**EXCM 385 Kinesiology and Sports Biomechanics w/Lab (4 Credit Hours)**

*Pre-requisites:* PHYS 112 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L)

Analysis of human movement with emphasis on the biomechanics of exercise and sport movement patterns.

**EXCM 387 Movement Anatomy in Exercise (3 Credit Hours)**

*Pre-requisites:* EXCM 385

Concepts and principles from anatomy and biomechanics are integrated into the analysis of human movement. This course focuses on application of the principles of human movement for normal function and application to different levels of physical performance through case based applications and classroom activities. Content includes anatomical lever systems, moment arms, stability and laws of motion. Systematic analysis of human movement in clinical conditions, performance, and wellness settings will be reviewed. Development of individual plans to improve movement is woven throughout the course.

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Explain the relationship between biomechanics, anatomy and human movement; 2) Understand upper and lower limb musculoskeletal anatomy, physiology, and function; 3) Apply functional anatomy in the analysis of normal physical performance; 4) Develop individualized plans to correct movement based on the assessment of the individual; 5) Evaluate movement techniques in various populations; 6) Evaluate client outcomes as a result of prescribed exercise modifications to improve movement patterns

**EXCM 390 Psychology of Health and Exercise (3 Credit Hours)**

*Pre-requisites:* EXCM 201 and PSYC 273

This course will present current research with focus on the leading theories and applications in health and exercise psychology. The implications and applications of research and practice for health behavior change by health and fitness professionals in diverse populations at the societal and individual levels will also be reviewed.

**EXCM 395 Clinical Internship and Patient Management (6 Credit Hours)**

*Pre-requisites:* EXCM 201 and Anatomy & Physiology (GNUR 155/155L and GNUR 156/156L), 4 of 8 upper division EXCM courses

Practical experience working with exercise physiologists, physical therapists, occupational therapists, rehabilitation therapists, and others, in cardiac care and orthopedic rehabilitation.

This course satisfies the Engaged Learning requirement.

**EXCM 399 Special Topics in Physical Therapy (2 Credit Hours)**

This course covers the general areas of physical therapy, as well as a relevant topic in physical therapy. This course will be offered as an elective and open to all students. Recommend evidence-based practices using cases studies (ie exercise prescription, patient education, society level affects).

*Outcomes:*

Examine various research and writing to gain understanding and knowledge in the areas of physical therapy; Evaluate scientific literature; Explore the impact a physical therapist has on their patient through movement improvement, pain management and prevention

## Food and Nutrition (FONU)

**FONU 110 Culinary Explorations (3 Credit Hours)**

Translate food and nutrition recommendations into delicious and realistic, food-based meals using basic culinary techniques. Examine the major food groups including both common and uncommon foods in each category. Explore ways to incorporate a variety of foods into meals considering budget, health, availability, personal values and preference.

*Outcomes:*

Upon successful completion of this course, the student will be able to: 1) describe foods in major food category; 2) explain food based recommendations to promote nutritional adequacy and health; 3) demonstrate culinary competence by recipe preparation; 4) critique a unique recipe that they developed; 5) plan menus for a week that meet specified criteria

**FONU 215 Fundamentals of Nutrition (3 Credit Hours)**

For non-majors. Nutrients essential to a healthy diet, consideration of nutrition issues of public concern.

**FONU 225 Food as Culture (3 Credit Hours)**

Explore culture through foods and food ways across the globe. This course examines food patterns of each continent using a multidimensional approach. Ethnic, geographical, religious, historical, geographical, and societal influences on food patterns of various regions and people will be presented through didactic and experiential activities. Information will be presented with the perspective of enhancing engagement and build positive relationships with future clients and communities served.

*Outcomes:*

Upon successful completion of this course, the student will be able to: 1) identify common food sources of nutrients in the eating patterns of selected cultures; 2) describe foods, dishes and preparation methods common to selected nations and cultures; 3) explain traditional food use in selected cultures including infant feeding and illness; 4) compare and contrast typical American to specialized ethnic retail food markets; 5) discuss experiences with ethnic food

**FONU 320 Nutrition Through the Life Cycle (3 Credit Hours)**

*Pre-requisites:* FONU 215 Fundamentals of Nutrition

Learn about nutrient needs through the lifecycle from birth through aging to support optimal health and human potential. Key nutrition concepts to support normal growth and development, health maintenance, and disease prevention will be included. Nutrient needs will be translated to food-based solutions as an integral component of health habits. Community resources will be examined.

*Outcomes:*

Upon successful completion of this course, the student will be able to: 1) describe the needs and roles of key nutrients at various stages of the life cycle; 2) translate nutrient needs into food-based solutions appropriate for life cycle stage; 3) explain common issues related to nutrition and food patterns specific to life cycle stage; 4) recommend community resources appropriate to life cycle stage

**Health Systems Management (HSM)****HSM 110 Healthcare in America (3 Credit Hours)**

This course introduces the U.S. healthcare system. Emphasis is given to the government's dominant role in health care delivery, payment and regulation, as well as the differences between public health and health care systems. The social justice implications of cost, quality and access are highlighted.

*Interdisciplinary Option:* Bioethics

This course satisfies the Engaged Learning requirement.

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Describe the evolution of health care in America and the influence of history on the current health care system; 2) Demonstrate knowledge of the structure and functions of the U.S. health care system; 3) Identify at an introductory level the political, economic and social factors that shape the US health care system; 4) Describe the inter-relationships among healthcare stakeholders including providers, suppliers, payers' workforce, and consumers; 5) Recognize the issues of health care disparities, access to care and social justice present in the current US health care system; 6) Identify criteria for evaluating the evolving and changing US health care system

**HSM 120 Essentials of Medical Terminology for Health Professionals (1 Credit Hour)**

This course introduces students to the language of the health professions. Word structure, prefixes and suffixes, and rules of building and analyzing medical words are introduced. Students explore terms relating to anatomy, pathology, diagnostic and clinical procedures, and select medical specialties. Emphasis is given to defining, interpreting and pronouncing medical terminology.

*Outcomes:*

Upon successful completion of this course, the student will be able to: 1) Identify structure of medical vocabulary including prefixes, suffixes and root words; 2) Apply the rules of building medical terms; 3) Recognize and define medical terms relating to anatomical structure and function, pathology, diagnostic and clinical procedures, and medical specialties; and 4) Use medical terminology accurately in context

**HSM 200 Careers in Healthcare Administration (2 Credit Hours)**

This course provides an introduction to healthcare administration careers. Students explore the various sectors and supporting industries making up the larger healthcare enterprise. Administrative career options and industry growth patterns are presented. Students are introduced to working professionals and professional organizations representing various sectors of the healthcare industry. Class discussions integrate healthcare industry vocabulary and jargon.

*Outcomes:*

Upon successful completion of this course, the student will be able to: 1) Distinguish healthcare sectors and supporting industries; 2) Describe a variety of roles and functions within healthcare administration; 3) Identify various entry points into a healthcare administration career; and 4) Explore areas of interest for career consideration

**HSM 210 Introduction to Global Healthcare Delivery (3 Credit Hours)**

Social determinants of health, comparative health systems, global health initiatives and their effects on health outcomes are addressed. Students examine current issues impacting global population health and improvements in care locally and worldwide. Roles of governmental, institutional and corporate organizations in financing, governing and delivering worldwide healthcare are studied.

*Interdisciplinary Option:* Bioethics, Global Studies, Bioethics, Global Studies

This course satisfies the Engaged Learning requirement.

*Course equivalencies:* X-HSM210/PUBH314/ENVS385

*Outcomes:*

At the successful completion of the course, the student will be able to: 1) Identify major global health care strengths and challenges; 2) Develop a broad worldview of communities and countries with different lifestyles, economics, and geopolitical systems and how these differences impact health care; 3) Explain the characteristics and roles of governments, non-governmental organizations (NGO's) and public/private partnerships as relates to health and health care around the world; 4) Analyze the impact of globalization on health and healthcare systems; 5) Assess the ethical and social justice issues associated with health inequities around the world; 6) Address a global health care issue, analyze the issue using relevant theoretical concepts and recommend a course of action

**HSM 220 Continuum of Healthcare Services (3 Credit Hours)**

This course examines healthcare delivery models designed to promote healthy aging, emphasizing social determinants, health promotion and care delivery for elders and people with chronic health conditions. Post-acute and long-term care services are explained, including community and facility-based options. The course highlights service delivery management, financing, quality and innovation in the context of social justice.

*Interdisciplinary Option:* Bioethics

This course satisfies the Engaged Learning requirement.

*Outcomes:*

1) Demonstrate an understanding of aging; 2) Analyze the challenges and opportunities faced by the US healthcare system as a result of changing demographics; 3) Apply theories of aging and disability to the management of long-term care services; 4) Compare healthcare delivery models used in post-acute and long-term care services; 5) Describe financing models used in long-term care services; 6) Describe quality management concepts and trends associated with long-term care services; and 7) Articulate the social justice and ethical issues associated with healthy aging and the care of people living in diverse long-term care environments



**HSM 230 Fundamentals of Health Equity (3 Credit Hours)***Pre- or co-requisites:* HSM 110

This course introduces the concept of health equity and provides an overview of health disparities in the U.S. Students examine the root causes of and explore populations most affected by health inequities. The course explores system approaches and strategies aimed at improving health equity.

*Interdisciplinary Option:* Bioethics*Outcomes:*

1) Analyze pathways of causality leading to health inequities; 2) Differentiate between disease causation and disparity causation; 3) Compare and contrast strategies to improve health equity in the US; 4) Identify roles and responsibilities of healthcare professionals as agents of change; 5) Explain the relationship between community, social justice and health status; 6) Describe philosophical principles that underlie social justice priorities; and 7) Generate ideas for programs and policies that promote health equity

**HSM 240 Healthcare Workforce Environment (3 Credit Hours)***Pre- or co-requisites:* HSM 110

This course explores workforce environment issues associated with employment within health care organizations. Topics include infection prevention and control, workforce safety, noise, supply chain management, OSHA and disaster planning to name a few. Quality and patient safety are emphasized from the standpoint of organizational planning, continuous quality improvement, and resource allocation.

*Outcomes:*

1) Define the role of healthcare management in providing a safe environment for patients, staff and visitors; 2) Define the role of healthcare administrators in pandemic preparedness and response; 3) Describe how quality and patient safety initiatives impact the workforce environment; 4) Describe how physical plant assets and deficits impact the workforce environment; 5) Describe how a diverse workforce and patient population impact the workforce environment; 6) Explain the influence of healthcare regulatory organizations on management decision-making; and 7) Understand large-scale environmental planning and practices, such as hazardous waste disposal and disaster preparedness

**HSM 280 Healthcare Management Ethics (3 Credit Hours)***Pre-requisites:* PHIL 130 or equivalent

This course explores ethics in the management of healthcare organizations. Course content is grounded in the theoretical constructs of philosophy, moral reasoning, and justice and their influence on the healthcare environment. Students analyze different types of reasoning in the decision-making process and use ethical theories to address practical issues in healthcare management.

*Outcomes:*

Examine ethical issues that impact the management of healthcare organizations; articulate moral views on issues relevant to the management of healthcare organizations, Demonstrate practical application of philosophy and specifically moral reasoning to ethical conflicts in healthcare management; Apply critical thinking to challenging moral questions in the management of healthcare resources; Evaluate decision options on moral questions in healthcare management while respecting differing opinions and rationally justifying decisions

**HSM 310 Healthcare Project Management (3 Credit Hours)***Pre-requisites:* HSM 110

This course provides an introduction to elements of project management in a healthcare setting. Emphasizes processes and tools that are the framework of project management. Covers elements of teamwork and the leadership and managerial skills required as part of the process. Students learn how projects progress and are executed. Corequisite or

*Outcomes:*

Upon successful completion of this course, the student will be able to:

1) Perform the developmental steps necessary to execute a project; 2) Utilize tools critical to project management; 3) Produce project deliverables within a team environment; 4) Differentiate between a functional manager and a project manager; 5) Apply problem-solving techniques to the project management process; 6) Explore concept of risk control in project management

**HSM 315 Healthcare Quality & Performance Improvement (3 Credit Hours)***Pre-requisites:* HSM 240 and HSM 368

This course examines the role of management in measuring performance and achieving quality in healthcare organizations. Emphasis is on the historical evolution, current concepts and future trends associated with measuring and evaluating health care quality. Students explore fundamental concepts of quality improvement design, planning, and methodology.

*Outcomes:*

1) Articulate the historical evolution and current forces driving changes in healthcare quality; 2) Describe major quality improvement models that provide a framework for change; 3) Differentiate the use of structural, process and outcome indicators for measuring quality; 4) Apply quantitative and qualitative performance measurement approaches to healthcare processes; 5) Apply quality improvement tools and techniques to healthcare processes; 6) Explain operational and clinical quality improvement data; and 7) Apply a systematic quality improvement approach to healthcare processes

**HSM 320 Healthcare Program Planning and Evaluation (3 Credit Hours)***Pre-requisites:* (ISSCM 241 or PSYC 304) and HSM 358

This course introduces students to the process of health program planning, including development of program objectives, methods, needs assessment, budget, timelines, contracting and marketing. Health program evaluation will emphasize design of a program evaluation including measurement and analysis of program outcomes, costs, and impact on community health concerns. Psychometric, economic, political and ethical issues related to health program planning and evaluation are explored.

*Outcomes:*

1) Understand concepts and principles of program planning and evaluation in healthcare; 2) Identify models for the planning and evaluation of health programs; 3) Understand ethical, political, economic and psychometric issues related to health program planning and evaluation; 4) Identify data sources for planning and evaluation of health programs; 5) Develop a plan for evaluation of a local healthcare program; 6) Recognize the importance of needs assessment to program planning; 7) Describe selected methods for evaluating need, process, impact (outcome), and efficiency; 8) Identify the components of an evaluation report; 9) Evaluate a local community's healthcare program; and 10) Explain the role and responsibilities of the healthcare manager in healthcare program planning and evaluation

**HSM 325 Healthcare Fiscal Management (3 Credit Hours)**

*Pre-requisites:* HSM 110 and FINC 301

This course introduces fundamental concepts related to financial management of healthcare organizations. Students explore financial-decision tools and the role of financial decision-making in managing delivery of care. How the U.S. health system impacts an organization's financial health and management is considered. Major concepts include cost-accounting, budgeting, cost/benefit analysis, and reimbursement mechanisms.

*Outcomes:*

At the successful completion of the course, students will be able to: 1) Describe the impact of political, social, and economic factors on the cost of patient care delivery; 2) Analyze the impact of US healthcare payment system on the organization and delivery of healthcare; 3) Evaluate financial health of a healthcare organization; 4) Apply principles of accounting to organizational decision-making; 5) Explain revenue cycle and budgeting in a healthcare organization; 6) Explain the legal, ethical, and social justice issues surrounding fiscal management in the health care setting; 7) Describe non-profit's role in providing uncompensated care and impact on financial decision-making

**HSM 330 Healthcare Legal & Regulatory Environment (3 Credit Hours)**

*Pre-requisites:* HSM 240 and (PHIL 284 or HSM 280)

This course introduces students to the legal and regulatory environment of healthcare. The course emphasizes common law, federal and state laws, and regulations that impact and affect healthcare providers and stakeholders. Major concepts include liability, malpractice, contracts, torts, anti-trust, taxation, insurance, fraud and abuse.

*Outcomes:*

1) Identify components of the US legal system and their relationship to the healthcare setting; 2) Differentiate the major governmental factors that regulate healthcare corporate structure, finances and practices; 3) Identify how fraud and abuse frameworks and laws impact healthcare institutions and group practices; 4) Examine the impact of malpractice and liability on the delivery, financing and administration of healthcare; 5) Apply risk identification and risk management principles to the healthcare environment; and 6) Evaluate the complexity of the legal environment and its impact on healthcare delivery

**HSM 338 Healthcare Strategy and Marketing (3 Credit Hours)**

*Pre-requisites:* HSM 110, HSM 230, and HSM 310

This course presents an overview of healthcare strategy and marketing. Students examine the unique features of healthcare as a product. Emphasis is given to strategic processes, including competitive analysis, strategic decision-making, and marketing fundamentals. Students are provided a foundation of marketing principles and tools in the context of strategic management.

*Outcomes:*

1) Discuss the principles of strategic management in the context of a healthcare organization; 2) Apply principles of marketing to healthcare organizations; 3) Utilize basic market research techniques, approaches, and tools; 4) Identify ethical and legal issues related to strategy and marketing in healthcare organizations; 5) Construct a high level strategic marketing campaign for a healthcare product, program or service; 6) Demonstrate effective teamwork skills in the development and communication of a multi-media based strategic marketing plan; and 7) Demonstrate skill and comfort in presenting strategy and marketing materials to peers and clients

**HSM 340 Health Care Policy (3 Credit Hours)**

*Pre-requisites:* HSM 110 and HSM 230; HSM 230 may also be taken as a corequisite

This course explores government's role in organizing, financing and delivering healthcare. With an emphasis on policy formation, advocacy and change, students apply policy analysis tools to contemporary public health and healthcare problems. Using examples such as Medicare, Medicaid or mental health policy, the course highlights the role of leadership as a key component of successful policymaking.

*Outcomes:*

1) Explain how federal, state, and local health policy is formulated and implemented; 2) Assess the balance between public good and individual rights in the policy process; 3) Analyze the impact of specific healthcare policy on health outcomes and the delivery of healthcare; 4) Identify future health policy directions that would improve the health status of Americans; 5) Explore resources to enhance understanding of leadership in health policy; and 6) Explain the role of leadership in advocating for healthcare policy change

**HSM 345 Healthcare Data Analytics (3 Credit Hours)**

*Pre-requisites:* (ISSCM 241 or PSYC 304) and ACCT 201

This course explores the use of clinical and operational data to improve outcomes and achieve greater efficiencies in healthcare systems. The role of data analytics in supporting informed decision-making is emphasized. Topics include data manipulation, analysis, and visualization. Practical business intelligence tools, such as Microsoft Excel® or Tableau®, are used.

*Outcomes:*

1) Discuss the role of data analytics in clinical and operational improvement efforts; 2) Demonstrate basic skills in the use of assigned business intelligence tools or applications; 3) Apply analytic techniques to health and healthcare data; 4) Identify meaningful patterns and trends in data sets to inform business decisions; 5) Understand and interpret business needs and extract appropriate data necessary to solve problems

**HSM 350 Healthcare Administration Capstone (3 Credit Hours)**

*Pre-requisites:* HSM 200, 310, 315, 330, 338, 345, 358, 368, 386 and FINC 301

The capstone course is designed to demonstrate accumulated knowledge in healthcare administration. Skills and theories gained throughout the curriculum are integrated into an original team project. Students apply central concepts such as operations, strategy, quality, finance and project management to a specialized area of healthcare in a manner congruent with the Jesuit value of social justice.

*Outcomes:*

1) Apply healthcare administration knowledge, concepts and skills to an identified healthcare delivery project; 2) Synthesize relevant knowledge from pertinent data sources to meet complex project goals; 3) Synthesize mentor feedback into a reorganized project plan; 4) Demonstrate problem-solving skills in the context of a healthcare delivery project; 5) Manage a large-scale project; and 6) Demonstrate effective teamwork in working toward a common project goal

**HSM 355 Special Topics (1-3 Credit Hours)**

*Pre-requisites:* Variable, used as needed, Variable hours and topics.

**HSM 358 Health Services Research (3 Credit Hours)**

*Pre-requisites:* ISSCM 241 or PSYC 304

This course introduces principles of scientific inquiry and the research process, including study design, data analysis and ethics. Students apply epidemiological methods to managerial problems, critically evaluate quantitative and qualitative evidence, and prepare a professional research presentation. The course provides a foundation for application of evidence-based practices in healthcare services.

*Outcomes:*

1) Outline research processes; 2) Describe epidemiological concepts relevant to healthcare management; 3) Discuss regulatory and policy factors that impact health-related research; 4) Clarify the importance of evidence-based practice to healthcare delivery and administration; 5) Articulate the ethical aspects of human subjects' research; 6) Evaluate health-related research articles; 7) Use web-based resources to examine evidence of a health-related research problem; and 8) Communicate research results to a professional audience

**HSM 360 Healthcare Administration Field Internship (6 Credit Hours)**

*Pre-requisites:* HSM 200, 310, 315, 330, 338, 345, 358, 368, 386 and FINC 301

This professional experience provides exposure to and experience in the healthcare environment. Under the supervision of a field preceptor and faculty advisor, students work with a healthcare organization integrating content gained through prior HCA coursework. Students develop and refine skills and practical knowledge by conducting a goal-based project(s) of value to the internship site. Project objectives are developed in concert between student, faculty, and preceptor. The experience involves three on-campus seminars, preparation of seminar deliverables plus a minimum of 196 on-site hours fulfilled on a weekly basis as mutually agreed between student and preceptor. The field experience as facilitated by Loyola University Chicago and the HCA Program concludes at the close of the semester and may or may not be compensated.

This course satisfies the Engaged Learning requirement.

*Outcomes:*

1) Apply healthcare administration theoretical knowledge, concepts, and skills to the practice setting; 2) Solve project challenges through the use of analytical and reflective tools; 3) Function as a collaborative team member; 4) Demonstrate critical thinking and refine communication skills; 5) Apply strategies of ethical reasoning to arrive at principled decisions in the Jesuit tradition; 6) Integrate supervisory, and faculty feedback to improve personal skills, knowledge, and effectiveness; and 7) Demonstrate the ability to work independently, thoughtfully, and resourcefully

**HSM 368 Management of Healthcare Organizations (3 Credit Hours)**

*Pre-requisites:* HSM 110

This course familiarizes students with the profession of healthcare administration by providing an overview to leadership, management, organizational development and change. Reflecting the uniqueness of the healthcare sector, students are introduced to key principles, practices and theories that support the socially just and ethical management of healthcare organizations.

*Outcomes:*

1) Differentiate between the roles of healthcare manager and healthcare leader; 2) Describe how management principles are applied in healthcare organizations; 3) Articulate organizational development challenges faced by healthcare entities; 4) Formulate strategies to manage a change intervention; and 5) Explain ethical and social justice responsibilities in healthcare management

**HSM 386 Health Information Systems Management (3 Credit Hours)**

*Pre- or co-requisites:* HSM 110

This course provides an overview of the use of information technology in the healthcare industry. Students are introduced to information systems currently used to manage and operate health care organizations, the applications designed to support consumer use, and the life cycle of an information system. The impact of information systems on an organization's overall financial and strategic planning, daily operations and quality improvement processes will be emphasized as will associated legal, ethical and security issues.

*Outcomes:*

1) Differentiate the major types, purposes and attributes of health information systems; 2) Assess health information needs of an organization; 3) Explain business value of health information systems; 4) Discuss how health information systems are used to manage organizational cost, quality and access; 5) Assess risk of privacy and security violations in health information systems; 6) Explain the life cycle of an information system and its management; and 7) Identify emerging trends in health information systems

**Public Health (PUBH)****PUBH 300 Introduction to Public Health (3 Credit Hours)**

Public health is the science of preventing disease and protecting and promoting the health of populations and communities. Through interactive exercises and application of concepts, this course considers its history; ethical principles; scientific foundation and tools; biomedical bases; socioeconomic and behavioral factors; environmental issues; and relationship to medical care.

*Course equivalencies:* X -PUBH 300/ ENVS 300

*Outcomes:*

Describe the history, core concepts, functions, and methods of public health; Define health disparities and explain how they are produced; Synthesize public health information and communicate it effectively

**PUBH 301 Health and the Environment (3 Credit Hours)**

This course is designed as an introduction to the field of environmental health, including regulations, research, disease prevention, and advocacy.

*Course equivalencies:* X-ENVS301/PUBH301/MBPH401

*Outcomes:*

Students will be able to outline approaches for assessing and controlling environmental hazards that affect community health and discuss major local, national, and global health challenges

**PUBH 303 Introduction to Epidemiology (3 Credit Hours)**

Epidemiology is the study of the distribution and determinants of disease in populations and remains the basic science of public health. The objective of this course is to familiarize students with the range of tools used to conduct epidemiologic analysis, including study design and measures of association.

*Course equivalencies:* X- PUBH 303/ENVS 303/MPBH 403

*Outcomes:*

Apply epidemiological methods to public health problems; select appropriate quantitative data collection, study designs, and analytical methods; apply adjustment techniques; and calculate measures of association; and interpret and communicate results

**PUBH 304 Health Behavior and Health Promotion (3 Credit Hours)**

This introductory course is designed to provide students with a foundation in behavioral theory as applied to public health practice, including health education and health promotion. Health education strategies will be examined from the perspective of health literacy, cultural competency, and adult learning behaviors among other dynamics.

*Outcomes:*

Describe a range of health behavior theories and frameworks commonly incorporated into public health interventions on the individual, inter-personal, and community level

**PUBH 305 Public Health Communication (3 Credit Hours)**

This course will teach students effective use of health literacy and health communication tools, including the use of mass media, online social media, and health professions' communication with patients in clinical settings.

*Outcomes:*

Students will be able to develop communication tools such as infographics and brief web-based videos and evaluate public health information

**PUBH 306 Critical Thinking in Public Health (3 Credit Hours)**

This course is designed to prepare students to make reasoned, intelligent decisions about public health matters by learning about and practicing how to think, read, write, and speak critically.

*Outcomes:*

Be able to evaluate the credibility of sources of information, scrutinize arguments, recognize biases in oneself and in others, and take a stand on public health issues and support it

**PUBH 307 Foundations of Public Health Policy (3 Credit Hours)**

Provides students with theoretical frameworks to understand public health policy issues, introduces public policy making processes, and enables students to analyze position papers on policy topics. Drawing from law, economics, political science, ethics and epidemiology, the course provides students with the knowledge and skills to understand policy-making processes.

*Course equivalencies:* PUBH 307/MPBH 407

*Outcomes:*

Explain how federal, state, and local health policy is formulated, implemented and evaluated; Assess the balance between the public good and individual rights in the policy process in public health

**PUBH 310 Public Health Internship (3 Credit Hours)**

This practical internship course will integrate theory, where students will unpack the complexities of Public Health and gain an understanding of the roles and responsibilities of professionals. Careers in Public Health are multidimensional, students will integrate real world experience reflecting on experiences of leadership, health equity, community engagement, and professional development.

This course satisfies the Engaged Learning requirement.

*Outcomes:*

Integrate academic internship experience with course curriculum academic content through critical reflection of leadership theory and development; assess leadership identity, leadership behavior, and civic role in a public health framework

**PUBH 314 Global Public Health (3 Credit Hours)**

This course is an introduction to global public health and focuses on health disparities on the international level. The course addresses the determinants, consequences and trends of infectious and non-communicable disease, maternal and child health, and refugee and migrant health in low-and-middle-income countries.

*Course equivalencies:* X-HSM210/PUBH314/ENVS385

*Outcomes:*

Students will be able to discuss major current global public health issues, identify effective and ineffective aspects of international public health programs, and create context-specific health promotion materials

**PUBH 390 Special Topics: Public Health Intelligence (3 Credit Hours)**

*Pre-requisites:* Students must have completed one statistics course including STAT 103, PSYC 304, STAT 335, ISSCM 241 equivalent

This course provides both a conceptual foundation and a hands-on introduction for PH informatics - the science of collecting, organizing, and using information to promote and protect the health of all people. Students will work with real-life data sets, from food safety to crime reports, while furthering their understanding of the intersection of public health practice and informatics.

*Outcomes:*

After taking this course, students will have developed a conceptual foundation for quickly assessing data sets and evaluating informatics approaches to produce high-quality information resources for decision makers

**PUBH 399 Public Health Capstone Experience (3 Credit Hours)**

This course is a cumulative, integrative and scholarly or applied experience or inquiry project. It may include internships, service-learning projects, senior seminars, portfolio projects, or research paper. The project provides the opportunity for students to demonstrate proficiency in effective communication skills through a written report and oral presentation.

This course satisfies the Engaged Learning requirement.

*Outcomes:*

Demonstrate in written report and oral presentation the knowledge and skills acquired during the undergraduate program through selected projects which translate gained information into public health practice, including research