HEALTH POLICY AND MANAGEMENT (HPM)

HPM 310. Introduction to Law and Ethics in Health Management. 3 Credits.
An introduction to health law and ethics for health administration undergraduate seniors.
Requisites: Prerequisite, HPM 350.
Grading status: Letter grade.

HPM 320. Introduction to Strategic Planning and Marketing. 3 Credits.
An introduction to the development and implementation of strategic planning and marketing processes in health care organizations.
Grading status: Letter grade.

HPM 330. Introduction to Health Organization Leadership, Management, and Behavior. 3 Credits.
Team-based service learning in a hospital, health center, or other organization to facilitate learning about leading teams, organizations, partnerships, and global initiatives. Change, conflict, human resources, and other topics are addressed through readings, cases, reflections, and guest practitioners.
Grading status: Letter grade.

HPM 340. Foundations of Health Care Financial Management. 3 Credits.
Basic methods and techniques in financial management of health care programs, including financial statement analysis, cost determination and allocation, pricing of services, and budgeting.
Grading status: Letter grade.

HPM 341. Information Systems, Technology, and Tools. 3 Credits.
The purpose of this course is to enhance students' understanding of information systems and technology in health care, specifically focusing on the limitations of such technology. Students will be introduced to MS Excel and MS Access and shown how tools within these programs can help to mitigate some of the limitations.
Grading status: Letter grade.

HPM 350. Introduction to Health Services Systems. 3 Credits.
HPM 350 and 352 provide an overview of the United States health system. HPM 350 reviews the organization, management, and financing of the United States health system and the resources required to provide health services. Both courses introduce students to careers in the field of health policy and management.
Gen Ed: US.
Grading status: Letter grade.

HPM 351. Politics, Public Health, and Health Policy. 3 Credits.
This course explores the politics of public health and health care policy in the United States, with a focus on current issues and controversies.
Grading status: Letter grade.

HPM 352. Introduction to Health Services Systems II. 3 Credits.
HPM 352, in conjunction with HPM 350, provides an overview of the United States health services system, including such topics as quality of care and managed care. The course also introduces students to careers in the field of health policy and management and helps students develop necessary communication skills.
Requisites: Prerequisite, HPM 350.
Grading status: Letter grade.

HPM 353. Information Systems, Technology, and Tools. 3 Credits.
The purpose of this course is to enhance students' understanding of information systems and technology in health care, specifically focusing on the limitations of such technology. Students will be introduced to MS Excel and MS Access and shown how tools within these programs can help to mitigate some of the limitations.
Grading status: Letter grade.

HPM 354. Foundations of Health Care Financial Management. 3 Credits.
Basic methods and techniques in financial management of health care programs, including financial statement analysis, cost determination and allocation, pricing of services, and budgeting.
Grading status: Letter grade.

HPM 355. Politics, Public Health, and Health Policy. 3 Credits.
This course explores the politics of public health and health care policy in the United States, with a focus on current issues and controversies.
Grading status: Letter grade.

HPM 393. Field Training in Health Policy and Management. 2 Credits.
Restricted to HPM B.S.P.H. students. Required of all B.S.P.H. students in HPM. The first six weeks of a supervised 12-week administrative internship in a health care organization.
Gen Ed: EE: Field Work.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 4 total credits. 2 total completions.
Grading status: Letter grade.

HPM 420. Community and Public Health Security: Disasters, Terrorism, and Emergency Management. 3 Credits.
This course examines systems for emergency management at federal, state, and local levels. The roles of emergency management, health services, and public health in disaster management are also reviewed. Every other week, evening online sessions required with instructors.
Grading status: Letter grade.

HPM 422. Emergency Management I: Analytic Methods. 3 Credits.
Introduction of analytical tools to assess, evaluate, map, and investigate disasters (including biological outbreaks). These tools will be used to improve planning and evaluation of disaster management programs. Every other week, evening online sessions required with instructors.
Grading status: Letter grade.

HPM 423. Emergency Management II: Disaster Management. 3 Credits.
Explores issues of preparedness, response, recovery, mitigation, and research in disaster management. Students will participate in evacuation decision making, volunteer management, and the development of a disaster exercise. Every other week, evening online sessions required with instructors.
Grading status: Letter grade.

HPM 435. Marketing for Not-for-Profit Organizations. 3 Credits.
Permission of the instructor. Application of basic principles of marketing and marketing decision models to problems in health care and other not-for-profit organizations.
Grading status: Letter grade.

HPM 472. Program Evaluation. 3 Credits.
Concepts and methods of the program evaluation paradigm as applied in health administration.
Grading status: Letter grade.

HPM 496. Readings in Health Policy and Management. 0.5-3 Credits.
Directed readings or research. Written reports are required.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 550. Environmental and Science Journalism. 3 Credits.
Prepare students to work as environmental and science journalists. The course emphasizes writing skills in all delivery formats and interpreting environmental, science, and medical information for consumers. Honors version available
Grading status: Letter grade
Same as: MEJO 560, HBEH 660.

HPM 550H. Environmental and Science Journalism. 3 Credits.
Prepare students to work as environmental and science journalists. The course emphasizes writing skills in all delivery formats and interpreting environmental, science, and medical information for consumers.
Grading status: Letter grade
Same as: MEJO 560H, HBEH 660H.
**HEALTH POLICY AND MANAGEMENT (HPM)**

**HPM 560. Media and Health Policy. 3 Credits.**
Introduces students to news media organizations and their role in health policy development. Students will learn how to evaluate media content and strategies and to effectively communicate via mass media.
**Grading status:** Letter grade.

**HPM 563. Advanced Health Policy Analysis. 3 Credits.**
The course is for master's and doctoral students interested in health policy. The course is intended to go beyond an introduction to policy analysis to a discussion and exploration of theories of policy analysis in a context of competing democratic ethics and values.
**Grading status:** Letter grade.

**HPM 565. Global Health Policy. 3 Credits.**
Coursework will focus on public policy approaches to global health, employing interdisciplinary methodologies to understand selected public health policies, programs, and interventions. For students who have a basic understanding of public health.
**Gen Ed:** GL.
**Grading status:** Letter grade
**Same as:** PLCY 565.

**HPM 571. Health and Human Rights. 3 Credits.**
Course focuses on rights-based approaches to health, applying a human rights perspective to selected public health policies, programs, and interventions. Students will apply a formalistic human rights framework to critical public health issues, exploring human rights as both a safeguard against harm and a catalyst for health promotion.
**Gen Ed:** PH, GL.
**Grading status:** Letter grade
**Same as:** PLCY 570.

**HPM 600. Introduction to Health Policy and Management. 3 Credits.**
This course provides an overview of the United States health care system. Students will explore the system's organization, financing, management, resources, and performance. For each topic, they will analyze relevant legislation and discuss current issues. Students will develop skills in policy research and analysis, health care system evaluation, and basic financial literacy.
**Grading status:** Letter grade.

**HPM 601. Issues in Health Care. 1 Credit.**
Lectures on current topics in health care.
**Grading status:** Letter grade.

**HPM 602. Concurrent Practice. 1-3 Credits.**
Permission of the program director. Supervised activities in an approved health organization, to include one or more specific projects, approved by HPM faculty member and directed by an approved preceptor/mentor in the organization.
**Grading status:** Letter grade.

**HPM 605. Practice Application Journaling I. 0.5 Credits.**
This course is the first of six field-based Journal Practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 606. Practice Application Journaling II. 0.5 Credits.**
This course is the second of six field-based journal practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Requisites:** Prerequisite, HPM 605.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 607. Practice Application Journaling III. 0.5 Credits.**
This course is the third of six field-based journal practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 608. Practice Application Journaling IV. 0.5 Credits.**
This course is the fourth of six field-based journal practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 609. Practice Application Journaling V. 0.5 Credits.**
This course is the fifth of six field-based journal practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 610. Practice Application Journaling VI. 0.5 Credits.**
This course is the sixth and final of six field-based journal practica in which students monitor their learning processes, identify where knowledge and skills learned in courses are helpful and relevant to areas of their professional responsibility, and apply that knowledge and those skills to actual work situations.
**Repeat rules:** May be repeated for credit. 1 total credits. 2 total completions.
**Grading status:** Letter grade.

**HPM 611. Public Health Concepts in a Systems Context. 3 Credits.**
This course develops systems reasoning in health policy and management students through the application of systems techniques and systems thinking to core public health concepts in health policy and management, environmental health, epidemiology, and health behavior and health education.
**Grading status:** Letter grade.
HPM 620. Implementing Health Informatics Initiatives. 3 Credits.
Focuses on implementing informatics programs and projects in health organizations. Informatics initiatives aim to facilitate effective information use for the purpose of improving the quality of health services and/or efficiency of processes. Therefore, these initiatives have implications for various stakeholder groups, including consumers, practitioners, administrators, and policy makers. 
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 630. IHI Course in Healthcare Quality Improvement. 1.5 Credit.
The IHI Certificate demonstrates an investment in further education and a strong knowledge base in quality improvement. Upon completion of this course, students will have met the requirements for the IHI Open School Certificate and participated in two in-person sessions.
Grading status: Letter grade.

HPM 634. Public Health Issues in Community Preparedness and Disaster Management. 3 Credits.
Examines conventional public health constructs of community preparedness and disaster management. Includes a review of traditional and emerging literature. Emphasizes conceptual development and application of adaptive leadership strategies.
Grading status: Letter grade
Same as: PWAD 634.

HPM 640. LEAN/Six Sigma I for Health Policy and Management. 1 Credit.
This course is an introduction to Lean Six-Sigma. Students will be exposed to continuous quality improvement (CQI) methods based on Toyota Production System (TPS or Lean) and Six-Sigma philosophy, methods, and tools.
Grading status: Letter grade.

HPM 641. LEAN/Six Sigma II for Health Policy and Management. 1 Credit.
This project-based course explores the phases of Six-Sigma approach to continuous quality improvement (DMAIC). The overall objective of this course is to help students understand the challenges and pitfalls involved in completing a DMAIC project to drive change at organizational, unit, and individual levels.
Requisites: Prerequisite, HPM 640.
Grading status: Letter grade.

HPM 660. International and Comparative Health Systems. 3 Credits.
Methods of comparing health systems, examinations of related national health systems, and analysis of related high prevalence health issues.
Grading status: Letter grade.

HPM 664. Globalization and Health. 3 Credits.
Globalization—its economic, environmental, political, technological, institutional, and sociocultural dimensions—historically and currently contributes to beneficial and adverse effects on population, community, and family and individual health.
Grading status: Letter grade
Same as: MHCH 664.

HPM 671. Statistical Methods for Health Policy and Management. 3 Credits.
Introduction to statistical analysis for healthcare settings using an Excel framework. Topics include variable types, sampling, probability distributions, descriptive statistics, hypothesis testing, categorical data analysis, ANOVA, and introduction to regression methods. Previously offered as HPM 470.
Grading status: Letter grade.

HPM 690. Special Topics in Health Policy and Management. 0.5-3 Credits.
Special topics course for health policy and management undergraduate students.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 2 total completions.
Grading status: Letter grade.

HPM 691H. Honors Research. 3 Credits.
Required preparation, approved cumulative grade point average by the end of the junior year. Readings and seminars for undergraduates showing potential and talent for research. Students will design an independent research project, write a proposal, and complete an IRB application toward partial completion of an honors thesis.
Gen Ed: EE- Mentored Research.
Grading status: Letter grade.

HPM 692H. Independent Honors Research. 3 Credits.
Permission of the instructor. Students collect data, analyze and report findings, and make recommendations to complete an honor thesis and present findings in presentation/poster format.
Requisites: Prerequisite, HPM 691H.
Gen Ed: EE- Mentored Research.
Grading status: Letter grade.

HPM 697. B.S.P.H. Capstone. 3 Credits.
The capstone course is an ‘integrative exercise’ for B.S.P.H. students prior to graduation. It is intended to simulate the integration of various disciplines—finance, human resources, ethics, policy, operations, and information technology—into a comprehensive and practical framework. Students work with healthcare organizations to solve financial or operational problems.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 701. Professional Training I. 1 Credit.
Restricted to HPM majors. Supervised professional training (fee is $550).
Grading status: Letter grade.

HPM 702. Professional Training II. 1 Credit.
Restricted to HPM majors. Supervised professional training (fee is $500).
Grading status: Letter grade.

HPM 703. Professional Training III. 1-15 Credits.
Restricted to HPM majors. Supervised professional training (fee is $500).
Grading status: Letter grade.

HPM 705. Healthcare Management Skills Development Workshop I. 0.5 Credits.
This course is the first of two workshops for students in the Executive Master’s Program. These workshops are designed to provide students exposure to key cross cutting skills that will be used in the program. These skills also are essential for effective healthcare management.
Grading status: Letter grade.

HPM 706. Healthcare Management Skills Development Workshop II. 0.5 Credits.
This course is the second of two workshops for students in the Executive Master’s Program. These workshops are designed to provide students exposure to key cross cutting skills that will be used in the program. These skills also are essential for effective healthcare management.
Requisites: Prerequisite, HPM 705.
Repeat rules: May be repeated for credit.
Grading status: Letter grade.
HPM 710. Health Law. 3 Credits.
An introduction to law and the legal system as it relates to the delivery and financing of health care.
Grading status: Letter grade.

HPM 711. Research Management and Ethics in Health Policy. 1 Credit.
This course is aimed at doctoral and M.S.P.H. students with interests in research management and ethics. Using cases and examples, the first part of the course focuses on major management and leadership issues, while the second part deals with ethically relevant matters.
Grading status: Letter grade.

HPM 712. Leadership and Ethics. 2 Credits.
This course is based on the notions that leadership and ethics are intertwined and that good leaders behave ethically. There is often no one right way to lead effectively. Also, there are few firm rules or principles that guide ethical decision making, and there is much room for debate.
Grading status: Letter grade.

HPM 713. Hospital Functions and Operations. 2 Credits.
This course provides exposure to the knowledge and skills required to solve the most pressing operational problems found across departments within today's complex health care institutions.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 714. Advanced Spreadsheet Modeling for Business. 3 Credits.
This course focuses on using advanced features of Microsoft Excel to create efficient spreadsheet models of common and complex business problems. It challenges students to use critical thinking and analysis to find effective solutions to real-life situations.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 715. Health Economics for Policy and Management. 3 Credits.
Permission of the instructor for nonmajors. Provides training in the theory of health economics and applies this theory to important issues in health policy and management.
Requisites: Prerequisite, BIOS 600.
Grading status: Letter grade.

HPM 715L. Microeconomics Lab. 1 Credit.
Permission of the instructor for nonmajors. Applications of health economics theory to current health care policy.
Requisites: Corequisite, HPM 715.
Grading status: Letter grade.

HPM 716. Applied Quality Improvement Methods for Healthcare and Public Health. 3 Credits.
The course objective is to develop, implement, and test a solution to improve health care or public health delivery, using a model called the Model for Improvement (or MFI). The model uses three questions to scope the improvement project and four steps, Plan-Do-Check-Act, to implement and test solutions.
Grading status: Letter grade
Same as: PUBH 716, MHCH 816.

HPM 718. Mental Health Services Research and Policy. 3 Credits.
This course is an introduction to mental health services research and policy. Topics include the financing of mental health services, supply of services, quality measures, assessing need, and barriers to care. The course includes seminar presentations by local and nationally recognized experts in mental health services research and discussion sessions.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 719. Introduction to Implementation Research and Practice in Public Health. 3 Credits.
This course introduces the concepts, frameworks, and methods of implementation research and practice. By the end of this course, students will be able to explain the rationale for this field, identify guiding frameworks, assess multilevel barriers and facilitators, and address barriers and facilitators with implementation strategies tailored to specific contexts.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 99 total completions.
Grading status: Letter grade
Same as: PUBH 719.

HPM 720. Management of Human Resources in Health Organizations. 3 Credits.
Emphasis is on clarifying concepts of human resources management and identifying the importance of human resources in health organizations.
Requisites: Prerequisite, HPM 730; permission of the instructor for students lacking the prerequisite.
Grading status: Letter grade.

HPM 725. Health Care Strategy and Marketing. 3 Credits.
This course introduces students to strategic planning and marketing in health services organizations. Students develop practical skills such as assessing the internal and external environment, competitor analysis, and evaluating strategic alternatives in different health care settings. It also explores the role the governing board plays in strategy development and management.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 726. Health Care Strategy and Marketing. 4 Credits.
This course introduces students to strategic planning and marketing in health services organizations. Students develop practical skills such as assessing the internal and external environment, competitor analysis, and evaluating strategic alternatives in different health care settings. It also explores the role the governing board plays in strategy development and management.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 728. Leadership and Workforce Management Strategies. 4 Credits.
This course provides an introduction and overview to leadership, management, human resources and organizational behavior, with the goal of aligning these with the organization's strategy and mission. The course integrates theory with practice through readings, lectures, written assignments, and guest presentations from different organizational perspectives. Assessment, practice and development of leadership, managerial and organizational skills will be accomplished through team exercises and small group work.
Grading status: Letter grade.
HEALTH POLICY AND MANAGEMENT (HPM)

HPM 730. Leadership and Workforce Management Strategies. 3 Credits.
This course provides an introduction and overview of leadership, management, workforce challenges, and organizational behavior. The course emphasizes the importance of aligning management practices with the organization's mission and goals. The course integrates theory with practice through readings, lectures, written assignments, experiential exercises, and guest presentations. Assessment, practice and development of leadership, managerial and organizational skills are accomplished through team exercises, self and peer assessments, and small group work.
Grading status: Letter grade.

HPM 734. Approaches to Business Plan Development. 1 Credit.
Approaches to Business Plan Development ('Capstone Prep') is a one-credit course to introduce and jumpstart the Spring Semester Capstone business plan process necessary for HPM 735.
Grading status: Letter grade.

HPM 735. Advanced Concepts and Applications in Health Policy and Management. 3 Credits.
Required preparation, completion of master’s core (can be concurrent). Restricted to HPM graduate students. Integrating and building upon the HPM master’s core, this comprehensive course focuses on organization policymaking and administration from the perspective of the CEO and top management.
Requisites: Prerequisite, HPM 734.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 738. Health Operations Management. 3 Credits.
Operations management (OM) involves the day-to-day management of an organization, by focusing on the analysis, design, planning and control of work processes in order to create value for clients. All organizations must manage their work processes, however surprisingly many do not have a systematic or rigorous approach to managing them.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 740. Health Care Financial Accounting. 2 Credits.
This introduces concepts of financial accounting to the non-accountant user of financial information. Basic accounting transactions, financial report preparation, concepts of accrual vs. cash accounting, not-for-profit health care accounting, and the analysis of health care organization financial reports.
Grading status: Letter grade.

HPM 741. Management Accounting for Health Administrators. 3 Credits.
Permission of the instructor for non-MHA majors. Covers selected topics in managerial accounting applied to health care.
Requisites: Prerequisite, HPM 740; permission of the instructor for students lacking the prerequisite.
Grading status: Letter grade.

HPM 742. Health Care Finance I. 3 Credits.
This course focuses on financial management, analysis and decision-making and the use of spreadsheets to help make better financial decisions. The course includes the healthcare environment, basic financial management concepts, capital acquisition, and cost of capital, capital structure, and capital budgeting.
Requisites: Prerequisites, HPM 740 and HPM 741.
Grading status: Letter grade.

HPM 743. Health Care Reimbursement. 1 Credit.
This online course in health care reimbursement is designed to provide students with relevant and current information about health care reimbursement methods and the complexities around it. After completion of the course, students should have an operational knowledge of health care reimbursement theory and practice.
Grading status: Letter grade.

HPM 744. Health Care Finance II. 2 Credits.
Focuses on capital allocation, financial condition analysis and forecasting, and other topics. Course is the conclusion to a five-course sequence in healthcare financial management. Each builds on the prior course with the intent of providing a comprehensive foundation in the concepts and practice of healthcare financial management.
Requisites: Prerequisites, HPM 740, 741, 742.
Grading status: Letter grade.

HPM 745. Financial Management and Analysis for Public and Nonprofit Entities. 3 Credits.
This course teaches financial concepts for students seeking leadership roles in the non-profit and government sector, including business planning, budgeting, accounting, performance management, and resource blending and braiding. Students will develop a business plan and learn key strategy and evaluation tools.
Repeat rules: May be repeated for credit.
Grading status: Letter grade.

HPM 746. Introduction to Financial and Managerial Accounting for Healthcare Organizations. 4 Credits.
Focuses on learning and applying key financial and managerial accounting tools and concepts to healthcare problems. Provides a broad introduction to key concepts, issues, tools, and vocabulary useful for policymakers and administrators. Topics include: reading and analyzing healthcare financial statements, recording transactions, budgeting, full costing, incremental costing, and responsibility accounting.
Repeat rules: May be repeated for credit. 8 total credits. 2 total completions.
Grading status: Letter grade.

HPM 747. Health Care Finance. 4 Credits.
The course focuses on financial management and analysis. The course includes the healthcare environment, basic financial management concepts, capital acquisition, cost of capital and capital structure, and capital allocation. After completion of the course, students should be able to apply financial management concepts in real world healthcare settings.
Requisites: Prerequisite, HPM 746.
Grading status: Letter grade.

HPM 748. Economic Principles, Health Insurance & Behavioral Economics in Health. 3 Credits.
This course provides students with an opportunity to investigate topics of healthcare policy and insurance from a finance and economics perspective. The course covers contemporary health policy topics in great depth and with a focus on economic and financial analysis as a tool to evaluate healthcare policies and proposed new legislation.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.
HPM 749. Data Visualization. 3 Credits.
Introduction to data visualization principles and tools for business professionals. Topics include cognitive processing of visual information, best practices in data visualization, effective data storytelling, data acquisition and preparation, and designing data visualizations using Tableau Desktop software.
Requisites: Prerequisite, BIOS 600 or HPM 671 or SPHG 711 with a grade of P or better; permission of the instructor for non-majors or for students lacking the prerequisite.
Grading status: Letter grade.

HPM 750. Introduction to Dental Public Health. 3 Credits.
Permission of the instructor. Survey of the theory and practice of dental public health, with an emphasis on basic knowledge and skills necessary for planning and evaluating dental public health programs.
Grading status: Letter grade.

HPM 751. Dental Public Health and Access to Oral Health. 3 Credits.
Students will evaluate systems of care that impact oral health and will understand the health policy process and engage in policy analysis. Issues to be explored will include: dental care policy and the health policy process; policy analysis; the legislative process; access to care for high risk populations; integrating dental services into public health programs; trends in the demand for dental care; trends expenditures for dental services; and managed dental care. Permission of the instructor.
Grading status: Letter grade.

HPM 752. Oral Epidemiology for Health Policy and Management. 3 Credits.
Focuses on the epidemiology of oral diseases and the implications and uses of this knowledge for dental health policymaking and administration of dental programs.
Requisites: Prerequisite, EPID 600 or HPM 750; permission of the instructor for students lacking the prerequisite.
Grading status: Letter grade.

HPM 753. Health Care in the United States: Structure and Policy. 4 Credits.
This core course is designed to provide students with an overview of the structure, systems, and policies of health care delivery in the United States. The goal is to increase students’ knowledge and abilities to analyze and address health care issues from both management and policy perspectives.
Repeat rules: May be repeated for credit.
Grading status: Letter grade.

HPM 754. Health Care in the United States Structure and Policy. 3 Credits.
This core course is designed to provide students with an overview of the structure, systems, and policies of health care delivery in the United States. The goal is to increase students’ knowledge and abilities to analyze and address health care issues from both management and policy perspectives.
Grading status: Letter grade.

HPM 755. Health Care in the United States: Structure and Policy. 4 Credits.
This core course is designed to provide students with an overview of the structure, systems, and policies of health care delivery in the United States. The goal is to increase students’ knowledge and abilities to analyze and address health care issues from both management and policy perspectives.
Grading status: Letter grade.

HPM 756. Health Reform: Political Dynamics and Policy Dilemmas. 3 Credits.
This course focuses on the political and policy dynamics of health care reform.
Grading status: Letter grade.

HPM 757. Health Reform: Political Dynamics and Policy Dilemmas. 3 Credits.
This course gives students a greater understanding of programs available to serve underserved populations, and how the ACA (or any replacement) will impact on care provided to underserved populations. The course is designed to help students think critically about the impact of policy changes on different populations.
Grading status: Letter grade.

HPM 758. Underserved Populations and Health Reform. 3 Credits.
The course will familiarize students with the history of health reform in the U.S., explore issues in health policy, and analyze the impact of health politics on policymaking.
Grading status: Letter grade.

HPM 759. Health Policy Analysis and Advocacy for Health Leaders. 2 Credits.
The course will familiarize students with the history of health reform in the U.S., explore issues in health policy, and analyze the impact of health politics on policymaking.
Grading status: Letter grade.

HPM 760. Healthcare Quality and Information Management. 3 Credits.
Integrates essential methods and principles in healthcare quality and information management. Emphasis on use of information to measure and improve quality. Will include presentations, individual/group projects, exercises, and group discussion.
Grading status: Letter grade.

HPM 761. Quality and Utilization Management. 3 Credits.
Evolution and current status of healthcare quality management systems and programs for utilization control. Includes discussion of alternative quality assurance methods, hospital accreditation, and government programs.
Requisites: Prerequisite, HPM 564 or 754.
Grading status: Letter grade.

HPM 762. Quality of Care. 3 Credits.
The quality of health care in the US has garnered significant attention. This course will examine 1) the current state of the quality of care in the US, 2) approaches to assess quality of care, and 3) strategies that have been implemented or proposed to improve the quality of care.
Grading status: Letter grade.

HPM 763. Cancer Prevention and Control Seminar. 3 Credits.
An interdisciplinary overview of cancer prevention and control. Emphasis on projects and activities from perspectives of epidemiology, health behavior and education, and health policy and management. Appropriate research design and methodologies are covered.
Grading status: Letter grade
Same as: EPID 772, HBEH 765.

HPM 764. Making Equity a Priority in Health Care Quality: Strategies for Research, Policy and Practice. 3 Credits.
This course examines recent work on defining, measuring, and improving health care equity in the contexts of research, policy, and practice. Health care inequities according to race/ethnicity, socioeconomic status, and geography will especially be highlighted.
Grading status: Letter grade.

HPM 765. Implementation Science in Health. 3 Credits.
This course introduces the concepts, theories, and methods of disseminating and implementing evidence-based health, behavioral health, and social service interventions. The course also examines the methods for conducting rigorous research on dissemination and implementation.
Grading status: Letter grade.

HPM 766. Informed Decision-Making in Cancer Care. 3 Credits.
This course will examine clinical decision-making in cancer care from the perspectives of providers, patients, and families.
Grading status: Letter grade.
HEALTH POLICY AND MANAGEMENT (HPM)

HPM 769. Cancer Outcomes Research Seminar. 1 Credit.
The Cancer Outcomes Research Program (CORP) offers a weekly seminar for faculty, students, and fellows/trainees interested in multidisciplinary cancer outcomes research. Guest speakers' topics include Quality of Care, Patient-reported Outcomes (PROs), Comparative Effectiveness, Health Informatics, Cancer Disparities, Decision Making, Dissemination/Implementation, and Health Economics, as related to cancer outcomes.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 770. Operations Research for Healthcare Systems. 3 Credits.
Review of the systems analysis process in healthcare systems. Deterministic and random models, mathematical programming, queueing, simulation, forecasting, and measurement. Emphasis on model formulation and computer solution of decision models.
Grading status: Letter grade.

HPM 771. Introduction to Regression Models for Health Services Research. 3 Credits.
This course provides an introduction to regression models used in health services research. We will discuss both ordinary least squares regression models, in which the dependent variable is continuous, and logit models, in which the dependent variable is binary. Stata software will be used for examples and assignments.
Grading status: Letter grade.

HPM 772. Techniques for the Economic Evaluation of Health Care. 3 Credits.
This course provides an investigation of the theory, methods, and application of economic evaluation to health care. Topics include methods used to structure an economic evaluation, measure and summarize health outcomes and estimate their value to patients or to the public, and identify resources used and estimate their costs.
Requisites: Prerequisite, EPID 600.
Grading status: Letter grade.

HPM 773. Introduction to Program Evaluation in Public Health and Health Care Settings. 3 Credits.
This course is a three-credit hour introduction to program evaluation in public health and health care settings. We discuss key concepts in planning, conducting, reporting, and utilizing evaluations. Through a semester-long project students develop a viable program evaluation design for a real-world program.
Repeat rules: May be repeated for credit. 3 total credits. 2 total completions.
Grading status: Letter grade.

HPM 775. Analytic Techniques in Health Policy and Management. 3 Credits.
This course covers a variety of analytic techniques and methodologies basic to more advanced analysis of decision problems in health administration.
Grading status: Letter grade.

HPM 776. Healthcare Quality and Information Management. 2 Credits.
The HPM 776/777 and 776/778 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality.
Repeat rules: May be repeated for credit. 4 total credits. 2 total completions.
Grading status: Letter grade.

HPM 777. Health Information and Quality Applications. 2 Credits.
The HPM 776/777 and 776/778 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality.
Repeat rules: May be repeated for credit. 4 total credits. 2 total completions.
Grading status: Letter grade.

HPM 778. Public Health Information and Quality Application. 1.5 Credit.
The HPM 776/777 and 776/778 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality.
Repeat rules: May be repeated for credit. 3 total credits. 2 total completions.
Grading status: Letter grade.

HPM 779. Operations Research for Healthcare Systems. 4 Credits.
Healthcare administrators face a range of decisions: some strategic, some financial, others operational. Through your program of study, you are developing analytical and conceptual skills that will help you to make better decisions when the time comes.
Repeat rules: May be repeated for credit. 8 total credits. 2 total completions.
Grading status: Letter grade.

HPM 781. Seminar in Comparative Effectiveness Research. 1 Credit.
The course provides an overview of substantive and methodological issues in CER, including randomized controlled trials; inferences from observational studies; literature syntheses; decision sciences/decision modeling; dissemination and implementation science; cross-cutting skills (e.g., strengths and limitations of administrative and clinical databases and electronic health records for CER).
Grading status: Letter grade.

HPM 783. Introduction to Healthcare Data and Applied Informatics. 3 Credits.
Explore and analyze healthcare data across the claims processing lifecycle. Using case studies and SAS software as a platform, gain skills for data management, analysis, and reporting to access healthcare utilization and patient outcomes, improve clinical practice, manage healthcare operations, gauge quality and performance, report financial metrics, and conduct research.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 785. Advanced Decision Modeling. 3 Credits.
This course covers advanced decision modeling methods in health care, including probabilistic sensitivity and value of information analysis, economic evaluation using clinical trial data, and discrete event simulation and agent-based/system dynamics modeling techniques. The course teaches analytical techniques and interpretation as well as and state-of-the-art best practices.
Requisites: Prerequisite, HPM 772.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.
HPM 786. Introduction to Participatory Systems Science in Health: Methods Overview. 3 Credits.
This course introduces systems science methods and their uses for promoting health. Topics include an overview of systems science methods and the breadth of health-related applications. Students learn how to identify complex problems for which different types of systems science methods are useful.
Repeat rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 789. Master’s Paper Development. 1 Credit.
Second-year M.S.P.H. or first-year M.P.H. students only. Broad topics related to the development and management of a research project are covered. The major goal is the development and completion of a proposal to be submitted for an independent master’s paper.
Grading status: Letter grade.

HPM 790. Advanced Health Policy Analysis and Advocacy. 3 Credits.
This class will provide students with an opportunity to learn about the health policy analysis and advocacy processes in the United States. Students will gain an understanding of the different ways in which health policies are made at the legislative, regulatory, and judicial systems. Students will also learn how to identify and analyze different policy options to address health problems, conduct a stakeholders’ analysis, and design an advocacy campaign.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 793. Health Policy and Management Internship. 1-2 Credits.
Restricted to HPM majors. Supervised field experience in approved health agencies. (Internship fee: $450.)
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 794. Patient-Reported Outcomes Measurement and Application in Healthcare Research and Practice. 3 Credits.
Patient-reported outcomes (PROs) include measures of health status, quality of life, and satisfaction with healthcare. This course provides an overview of the PRO measurement and research field, and discusses how to design and evaluate a PRO measure and best practices for integrating PRO in clinical research and healthcare settings.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 6 total credits. 2 total completions.
Grading status: Letter grade.

HPM 795. Introduction to Healthcare: Organizations and Policy. 4 Credits.
This course introduces students to the structure and systems of healthcare by examining policy issues surrounding choices for healthcare financing, organization, payment, regulation, and public health. The goal is to increase students’ knowledge and abilities to analyze and address health care issues from both management and policy perspectives.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 804. Introduction to Healthcare Database Research. 3 Credits.
Course will provide foundational knowledge for using administrative health care claims and other relational data for health services research. Students will learn to: manage large databases in SAS, identify key variables in administrative data, and design and implement a study protocol.
Grading status: Letter grade
Same as: DPOP 804.

HPM 810. Leadership in Health Law and Ethics. 2 Credits.
Course is designed to provide learners with an introduction and overview of critical issues relating to law, ethics, and public health.
Grading status: Letter grade.

HPM 815. Graduate Health Economics Seminar. 1 Credit.
Permission of the instructor. Discussion of recent papers in health economics. Students must have solid knowledge of graduate microeconomics theory and econometrics.
Grading status: Letter grade.

HPM 820. Organizational Leadership Theory and Practice. 2 Credits.
Focus is on the behavioral, power-influence, trait, and situational approaches to leadership. Addresses core leadership principles plus leadership-followership theory, transformational and strategic leadership, and creating change.
Grading status: Letter grade.

HPM 823. Global Health. 1 Credit.
This course analyzes health systems in global perspective. Although health systems vary in structure, they face similar issues. This course includes discussion about the U.S. health system as well as health systems of developing, low-income, and middle-income countries. This course will assess WHO health systems building blocks, and will identify system elements from different countries that could be used to improve access, quality or health outcomes in the student’s home or work country.
Grading status: Letter grade.

HPM 830. Translational Health Disparities: Research, Practice & Policy. 3 Credits.
This course will focus on the concepts, principles, methods, and applications of health disparities science, practice, and policy. It will integrate principles and practice of community engagement. Experts from diverse disciplines will give lectures on health disparities research, practice, and policy. Student teams will work on real life case studies.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 860. Population Perspectives for Health. 2 Credits.
This course examines historical and contemporary population health and public health perspectives. These perspectives shape the politics and policy making that affect global health. The practical goal is to help the entering DrPH student develop a grounding for further exploration of topics that may evolve into a dissertation.
Grading status: Letter grade.

HPM 871. Seminar in Teaching Health Policy and Management. 1 Credit.
Problems and processes of teaching health policy and management, including supervised practicum experience.
Grading status: Letter grade.
HPM 872. Selected Topics in Health Policy and Management: Advanced Seminar. 3 Credits.
Permission of the instructor. Integrated study of selected theory and research as it relates to the organization and delivery of health services. Separate seminars are developed to correspond to the doctoral student's specific interests and needs.
Grading status: Letter grade.

HPM 873. Policy Seminar in Health Policy and Management. 1 Credit.
Seminar on policy issues in health policy and management.
Grading status: Letter grade.

HPM 874. Advanced Research Seminar in HPM. 1 Credit.
This seminar will develop core competencies through: (1) journal club to develop competencies in research design and expose students to diverse content and methodologies; and (2) professional development series.
Grading status: Letter grade.

HPM 880. Principles of Health Policy Research Methods. 3 Credits.
First course in the department's sequence in empirical analysis. Covers principles of statistical inference, univariate and bivariate analysis, statistical software applications, and mathematical concepts necessary for linear regression and further topics.
Repeat rules: May be repeated for credit. 3 total credits. 2 total completions.
Grading status: Letter grade.

HPM 881. Linear Regression Models. 3 Credits.
Equivalent background in probability theory/statistics for student lacking the prerequisite. Required preparation, matrix algebra, derivatives, logs/exponentials, and Stata. This course is an introduction to linear regression models. Topics include least squares regression, multicollinearity, heteroscedasticity, autocorrelation, and hypothesis testing.
Requisites: Prerequisite, BIOS 600.
Grading status: Letter grade.

HPM 882. Advanced Methodology in Health Policy and Management. 3 Credits.
This course is an introduction to linear regression models. Topics include linear algebra, least squares regression, multicollinearity, heteroscedasticity, autocorrelation, and hypothesis testing.
Requisites: Prerequisites, HPM 496 and 796.
Grading status: Letter grade.

HPM 883. Analysis of Categorical Data. 3 Credits.
This course is an introduction to the analysis of categorical data using maximum likelihood and other non-linear techniques and specification tests. Topics include models in which the dependent variable is not continuous, including logit, probit, censored data, two-part, and count models.
Requisites: Prerequisites, HPM 881 and 882; permission of the instructor for students lacking the prerequisites.
Grading status: Letter grade.

HPM 884. Overview to Health Services Research/Health Policy. 3 Credits.
Pre-doctoral standing or permission of the instructor. This course provides an overview of the field of health services research and health policy. It introduces basic components of the research process, including literature synthesis, development of a research question and hypothesis, and use of conceptual models to guide research questions.
Grading status: Letter grade.

HPM 885. Health Services/Health Policy Research Methods. 3 Credits.
This course explores how to develop answerable, policy-relevant, ethical research questions; operationalize questions with actionable specific aims' and identify optimal research design for answering a particular question. It introduces primary data collection methods (e.g., interviews, focus groups, surveys) and secondary data sources (e.g., administrative claims, medical, records).
Requisites: Prerequisite, HPM 884.
Grading status: Letter grade.

HPM 886. Advanced Health Services Research Methods Applications. 3 Credits.
This course focuses on applications of research methods that are relevant to health services and health policy researchers. Skills and topics covered in HPM 884 and HPM 885.
Requisites: Prerequisites, HPM 884 and 885.
Grading status: Letter grade.

HPM 890. Special Topics in HPM. 0.5-3 Credits.
Course reserved for special topics in HPM for graduate-level students only.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 2 total completions.
Grading status: Letter grade.

HPM 893. Public Health Informatics Practicum. 2 Credits.
This one credit hour course introduces health leaders to the field of health informatics. Topics include overviews of various informatics tools/projects, and further develop professional skills and knowledge essential in the public health informatics field. Students will participate in weekly (2 hr) informatics discussions with practicum preceptors and have an opportunity to meet and interact with successful health informatics professionals.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 930. Doctoral Seminar in Organization Theory and Health Service Organizations. 3 Credits.
Permission of the instructor for nondoctoral students. Review and application of selected developments in organization theory to health services research.
Grading status: Letter grade.

HPM 940. Leadership in Health Informatics. 1 Credit.
This one credit hour course introduces health leaders to the field of health informatics. Topics include overviews of various informatics interventions and implementation considerations for using information to improve the delivery of health services in diverse settings.
Repeat rules: May be repeated for credit. 4 total credits. 2 total completions.
Grading status: Letter grade.

HPM 945. Dissertation Planning and Preparation. 2 Credits.
Part of a sequence to guide students in planning, development, and implementation of Dr.P.H. dissertations. Designed to prepare students to identify appropriate research topics, plan the approach, organize, and write.
Grading status: Letter grade.
HPM 946. Dissertation Planning and Preparation II. 1 Credit.
The purpose of this course is to build on students' progress on work initiated in HPM 945 and continue to guide students through the steps necessary to complete a dissertation proposal. In collaboration with faculty, learners will assess the current state of their proposals and complete revisions and additional refinements, culminating in dissertations that are ready to be defended by fall of the third year in the program.
Repeat rules: May be repeated for credit. 2 total credits. 2 total completions.
Grading status: Letter grade.

HPM 947. Dissertation Planning and Preparation III. 1 Credit.
The purpose of this course is to build on students' progress on work initiated in HPM 946 and continue to guide students through the steps necessary to complete a dissertation proposal. In collaboration with faculty, learners will assess the current state of their proposals and complete revisions and additional refinements, culminating in dissertations that are ready to be defended by fall of the third year in the program.
Repeat rules: May be repeated for credit. 2 total credits. 2 total completions.
Grading status: Letter grade.

HPM 951. Literature Reviews and Appraisal. 2 Credits.
This course is the second in a sequence of courses in research design and methods in the executive Dr.P.H. program. The course explores the nature and process of scientific inquiry in the field of public health, establishing a foundation for methodological exploration, and focusing on the process of developing researchable questions.
Grading status: Letter grade.

HPM 952. Community Involvement in Research. 1 Credit.
Relevant literature and guest speakers will highlight cases depicting different levels of community involvement in public health research.
Grading status: Letter grade.

HPM 953. Practice Based Research. 2 Credits.
Designed to provide Dr.P.H. students with grounding in basic quantitative and qualitative research techniques used in health services research. Topics include types of research designs, measurement scales and coding nomenclatures, analytical techniques for quantitative data, research techniques for primary data collection, research opportunities with secondary data, and qualitative research methods.
Grading status: Letter grade.

HPM 954. Health Strategy. 2 Credits.
The purpose of this class is to enhance participants' behavioral complexity as leaders. Examines several major approaches to organizational strategy. Topics include diversification, transaction cost economics, agency theory, the resource-based view of the firm, and processes of strategic decision making.
Grading status: Letter grade.

HPM 955. Fundamentals of Research Analysis. 3 Credits.
This course will provide students with 'hands-on' experience in qualitative, quantitative, and policy analytical techniques.
Grading status: Letter grade.

HPM 957. Crisis Leadership. 1 Credit.
Offered exclusively to students in the Executive DrPH program, this course exposes students to the theoretical and practical aspects of organizational crises and prepares them to lead effectively in the midst of crisis situations.
Repeat rules: May be repeated for credit. 2 total credits. 2 total completions.
Grading status: Letter grade.

HPM 958. Financial Leadership. 3 Credits.
DrPH students only. Understand the major concepts of financial oversight, including budgeting, financial statement analysis, internal controls, governance, and the Sarbanes-Oxley Act, and be able to apply them to all organizations, whether public, private, non-profit, or governmental. Utilizing both individual and team-based learning.
Grading status: Letter grade.

HPM 959. Strategic Management in Health Leadership. 2 Credits.
The purpose of this class is to enhance participants' competence in leading within complex and dynamic systems.
Grading status: Letter grade.

HPM 962. Marketing and Public Relations for Health Leaders. 2 Credits.
This course is one of a series of leadership courses in the executive Dr.P.H. Its main purpose is to help students understand public health from the perspective of external audiences.
Grading status: Letter grade.

HPM 963. Program Evaluation for Health Leaders. 2 Credits.
This course is one of a series of research courses in the executive Dr.P.H. Its main purpose is to help students understand the purposes of evaluation.
Grading status: Letter grade.

HPM 964. Implementation Science. 1 Credit.
This course will provide an overview of implementation research and practice. It will introduce students to guiding conceptual frameworks; barriers, facilitators, and implementation strategies at the intervention, individual, organizational, and policy levels; core issues related to sustainment and scale-up; and designs and methods to evaluate implementation research and practice efforts.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 965. Cultural Competence for 21st Century Health Leaders. 1 Credit.
We will examine the ways in which culture and cultural competency intersects with health, and how public health efforts (domestic-global) can benefit by understanding relationships between culture and health.
Class sessions will be a combination of presentations by the instructor, class discussions, and student presentations. Two papers are required.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 99 total completions.
Grading status: Letter grade.

HPM 966. Systems Thinking/Collective Impact. 1 Credit.
This course has two parts, both focused on applying practical, structured systems thinking approaches to improve care, service delivery systems, policy, and/or environments in which we live. The first part of the course is person-centered applying systems thinking tools to understand individuals experiences as the foundation for driving change.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.
HPM 967. Quality Improvement. 1 Credit.
Provides an introduction and overview of quality improvement efforts in health care. Explores the evidence for why quality improvements are needed, measurements of how health care quality is determined as well as how to implement and manage successful quality improvement techniques.
Grading status: Letter grade.

HPM 968. Managing the Healthcare Workforce. 1 Credit.
Workforce issues play a central role in virtually all organizational problems and challenges. At times, workforce issues may be the primary cause of a problem, while in other cases, they may be one of several underlying causes. Similarly, it is difficult to identify a solution to an organizational problem that does not involve some aspect of workforce management.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 969. Program Planning and Design. 1 Credit.
The course focuses on approaches to plan programs that promote individual and community health. The course is anchored in the Intervention Mapping approach. Students will develop an understanding of the essential steps in the program planning process: needs assessments, establishing program goals and objectives, and selecting and developing program strategies.
Repeat rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading status: Letter grade.

HPM 970. Training and Pedagogy for Health Leaders. 1 Credit.
In this class you will learn how to apply best pedagogical practices to develop effective educational experiences that meet learning needs of audiences in academic, organizational, and community settings.
Repeat rules: May be repeated for credit.
Grading status: Letter grade.

HPM 992. Master's (Non-Thesis). 3 Credits.
HPM 994. Doctoral Research and Dissertation. 3 Credits.