

Massachusetts College of Pharmacy and Health Sciences

School of Arts and Sciences

Doctor of Health Sciences Program Scholarship Course Sequence Student Guidelines

August 29, 2026

Introduction

The purpose of the Core Scholarship course sequence in the Doctor of Health Sciences (DHSc) Program is to prepare you with the knowledge and skills required to critically search for, evaluate, synthesize, and apply evidence to address complex challenges in health sciences practice. As a DHSc student, you will complete a six-course sequence designed to develop competencies in research methodology, evidence-based practice, implementation, evaluation, and dissemination. Throughout the sequence, you will apply these concepts through a project-based educational experience aligned with your professional interests, expertise, and career goals. The curriculum is intentionally structured to help you master a systematic process of identifying and evaluating evidence, determining its relevance and quality, and translating that knowledge into meaningful action within your field of practice.

A central component of the Core Scholarship sequence is the development of a scholarly manuscript that evolves across multiple courses. Early in the sequence, you are encouraged to identify a peer-reviewed journal, professional publication, conference proceeding, or other dissemination venue that aligns with your professional area of practice, project topic, and intended audience. As your project develops, you should become familiar with the scope, readership, author guidelines, manuscript formats, and reporting expectations of your selected venue. Throughout the sequence, you should use these requirements to inform the development of your scholarly manuscript, recognizing that writing conventions, organizational structures, and dissemination priorities may vary across disciplines and professional fields.

A manuscript template provided in this guide serves as a general recommended framework for you to begin organizing and developing your project. It is intended to help you address the essential elements of scholarly inquiry, including problem identification, evidence review, critical appraisal, evidence synthesis, recommendations, implementation planning, evaluation, and dissemination. The template is not intended to be prescriptive, and you may adapt the organization, section headings, and presentation of content to align with the requirements of your selected journal, discipline, or dissemination venue, with faculty approval as appropriate.

The specific focus of your Core Scholarship project should reflect your professional interests, expertise, and practice setting. The goal of the Core Scholarship sequence is to empower you with a scholarly, evidence-informed approach to translating knowledge into action that advances health, promotes equity, and contributes to meaningful improvements in practice, systems, and population health outcomes.

Examples of published scholarly products are provided later in this guide to illustrate the range of application-oriented deliverables that may emerge from the Core Scholarship sequence. These examples demonstrate how evidence-informed scholarship can be translated into practical solutions, programs, policies, tools, and interventions that support positive change in healthcare, public health, and health systems.

Evidence-Informed Curriculum

The curriculum is designed to provide you with the knowledge, skills, and training needed to systematically investigate a problem of practice and develop an evidence-informed scholarly project. Through six integrated courses, you will learn how to identify, evaluate, synthesize, translate, implement, and disseminate evidence to address challenges in healthcare, public health, community health, and health systems practice.

The six courses in the Core Scholarship sequence are:

1. HSC.801 Introduction to Doctoral Studies
2. HSC.815 Healthcare Research Methods
3. HSC.852 PICO Question Development and Literature Search
4. HSC.854 Appraisal of the Evidence
5. HSC.750 Evidence Translation and Implementation
6. HSC.856 Dissemination of Findings

HSC.801 Introduction to Doctoral Studies

HSC.801 introduces you to the foundational skills required for scholarly inquiry, academic writing, and evidence-informed practice. You will identify and begin exploring a problem within your field of practice and learn how scholarly evidence can be used to better understand and address real-world challenges. You will develop the foundational competencies needed to begin considering how a problem of practice can be organized into a focused, searchable inquiry.

HSC.815 Healthcare Research Methods

HSC.815 explores the role of the scholar-practitioner in the health sciences, focusing on scientific methods, critical thinking, and the application of research evidence to professional practice. This course provides the methodological foundation needed to investigate and refine a problem of practice that will serve as the primary focus of your Core Scholarship work.

HSC.852 PICO Question Development and Literature Search

The purpose of HSC.852 is to guide the development of a focused, answerable question and provide the knowledge and skills needed to identify and retrieve high-quality evidence. Learning how to conduct efficient and comprehensive literature searches is an essential component of the Core Scholarship process. This course reinforces the principles of evidence-based practice while introducing the relationship between evidence generation, knowledge translation, and practice improvement.

HSC.854 Appraisal of the Evidence

The purpose of HSC.854 is to develop your ability to critically evaluate scientific literature. You will learn to assess the quality, validity, relevance, and applicability of published evidence to your problem of practice. Using established appraisal tools, you will evaluate a range of study designs, including systematic reviews, randomized controlled trials, cohort studies, qualitative research, and clinical or public health practice guidelines.

HSC.750 Evidence Translation and Implementation

In this penultimate Core Scholarship course, you will learn how to bridge the gap between evidence and practice by applying implementation science approaches to your problem of practice. You will also develop program evaluation approaches to scholarly products developed in previous courses and develop practical skills for leading change in health sciences settings. By the end of the course, you will have assembled an implementation-ready portfolio and strategy for advancing evidence-informed practice.

HSC.856 Dissemination of Findings

In the final course, you will integrate the knowledge, skills, and competencies developed throughout the program to produce a final scholarly product that addresses a real-world challenge in healthcare, public health, community health, or health systems practice. Building upon the PICO-defined problem of practice and the scholarly products developed throughout

the sequence, you will develop a dissemination strategy that aligns the identified problem, the evidence-informed solution, and the intended audience or setting.

Through the preparation of a scholarly manuscript and formal presentation, you will communicate the significance of the problem of practice, the evidence supporting the proposed solution, and its potential application in professional settings. Depending on your goals and practice context, the final scholarly manuscript will describe a "product" may take the form of a real-world implementation plan, policy recommendation, quality improvement initiative, educational program, technology-supported solution, community-based intervention, professional resource, or another application-oriented deliverable designed to advance evidence-informed practice.

Planning Considerations

The Core Scholarship sequence is designed as a developmental process in which your work builds progressively from one course to the next. As you advance through the sequence, you should expect feedback received in earlier courses to inform and strengthen subsequent assignments and scholarly products. Some considerations as you plan your scholarly project:

- The faculty member assigned to each course is responsible for evaluating your assignments, participation, and overall performance within that course. Feedback provided by course faculty is intended to support the continued development of your Core Scholarship project and should be incorporated into future assignments and manuscript revisions as you progress through the sequence.

- You may choose to work with a mentor or subject matter expert (SME) whose professional expertise aligns with your area of practice or project topic. While mentors and SMEs do not evaluate or grade course assignments, they may provide valuable guidance, constructive feedback, and recommendations to support the development of your project.

- You are encouraged, but not required, to discuss the overall goals, direction, and progress of your project with your mentor or SME throughout the Core Scholarship sequence. Prior to submitting major assignments, particularly those identified as key project milestones (Table 1), you should seek feedback to help strengthen the quality and applicability of your work. Maintaining regular communication regarding project expectations, timelines, and deliverables can help ensure your project remains focused and relevant to your professional goals.

- Scholarly writing is an essential component of doctoral education and a critical competency for scholar-practitioners. You are encouraged to utilize resources such as the MCPHS Writing Center to strengthen the clarity, organization, grammar, and readability of your written work. Course faculty will evaluate your writing and provide feedback but are not responsible for editing assignments prior to submission.

- Because the Core Scholarship sequence is intentionally scaffolded, successful completion of each course is required before progressing to the next course in the series. Students must earn a B grade or better in each Core Scholarship course to advance. Students who do not earn the minimum required grade must repeat the course before continuing in the sequence.

- Because your scholarly manuscript and final project are developed across multiple courses, you are strongly encouraged to maintain organized records of faculty feedback, manuscript drafts, literature searches, evidence appraisal materials, and project documents. Retaining and incorporating prior feedback will support the development of a stronger final manuscript and scholarly product.

- The time between semesters should be viewed as an important period for project development. You are encouraged to use this time to revise your manuscript, incorporate faculty feedback, strengthen literature reviews and evidence syntheses, consult with mentors or subject matter experts, and prepare materials needed for the next course in the Core Scholarship sequence. Continuous development of your project throughout the program will contribute to a more cohesive and scholarly final product.

- You are encouraged to identify a potential journal, professional publication, conference, or dissemination venue early in the Core Scholarship sequence. Developing your manuscript with a specific professional audience in mind can help guide decisions related to scope, structure, writing style, and dissemination strategies throughout the project development process.

Important Note about this Guidance

All doctoral programs adhere to University Policies and Procedures outlined in the University Catalog and Student Handbook. The information contained in this document is to facilitate a holistic understanding of the overall DHS Core Scholarship process and does not supersede any policies or procedures, or official descriptions outlined in the University Catalog, Student Handbook, or individual course syllabi.

Table 1. Key Milestones and Learning Outcomes in the Core Scholarship Courses.

Course	Key Milestone	Your Expected Learning Outcome
HSC 801	Assignment #3 Problem of Practice	Analyze a research question. This assignment requires you to **identify a professional practice problem** (a research question).
HSC 815	Assignment #4 PICO Worksheet	This assignment requires you to **apply the PICO(t) framework** and develop a **specific methodological approach to answer the question** associated with your professional practice problem.
HSC 852	Assignment #2 Literature Review	Identify and **review high-quality literature** to assist in answering your research question.
	Assignment #3 Seminar Presentation	Present the approach you selected, including the literature, and rationale for selection; describe **how a practical intervention** may improve a health outcome.
HSC 854	Assignment #1 Critical Appraisal	Critically **appraise the literature you have identified** in HSC 852 in a manner that seeks to test your research question.
	Assignment #2 Peer Review	Participate in a **peer-review process** to critically appraise the literature you have identified.
	Assignment #3 Synthesis of Evidence	**Synthesize high-quality evidence across sources and themes**. Analyze the strengths and limitations of key evidence and summarize the findings as they relate to the developed question.
HSC.750	Assignment #1 Logic Model	Provide a concise **framework** that explains how an evidence-based intervention and its implementation strategies are **expected to produce the desired outcomes**.
	Assignment #3 Implementation Portfolio	Building on previous assignments, the implementation portfolio is an integrated collection of applied deliverables that translates synthesized evidence into an evidence-informed, **evaluation-ready implementation plan**.
HSC 856	Assignment #2 Dissemination Plan	Develop a plan for the **dissemination** of your scholarly project findings.
	Assignment #3 Final Presentation	Present your Core Scholarship **project findings** and **the proposed plan for dissemination that translates your research into action**.

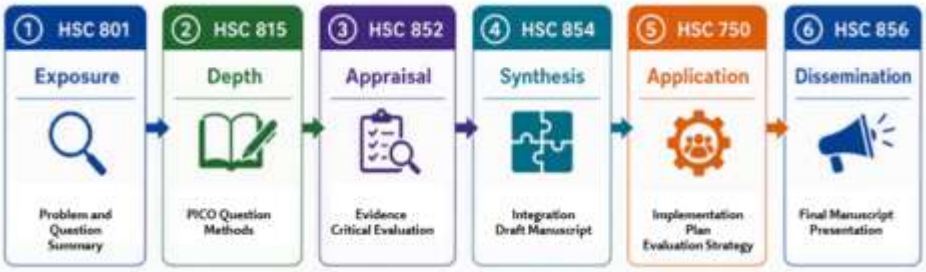
Manuscript Development

In addition to developing competencies in research methods, evidence appraisal, implementation science, and dissemination, you will progressively develop a scholarly manuscript that serves as the empirical evidence-based foundation for your Core Scholarship project. The manuscript is designed to evolve across the curriculum, with each course contributing specific components that are refined and expanded throughout the sequence.

You are encouraged to identify a peer-reviewed journal, professional publication, conference, or other dissemination venue early in the Core Scholarship sequence. Throughout the program, you should develop your manuscript with the intended audience, expectations, and scholarly conventions of that dissemination venue in mind. The manuscript template provided in this guide serves as a general minimum standard and framework for organizing your work and ensuring that all essential elements of evidence-informed scholarship are addressed. Because publication requirements differ across disciplines and professional fields, you may adapt the manuscript structure, section headings, and presentation of content, with faculty guidance, to align with the requirements of your selected dissemination venue while maintaining the scholarly rigor expected of doctoral-level work.

The Core Scholarship sequence is designed as an integrated opportunity to develop an evidence-informed translation-to-practice product. Each course contributes to specific elements that are revised and strengthened throughout the curriculum. By the end of HSC.854, you will have completed the essential elements of a draft manuscript to describe your project. In HSC.750 and HSC.856, you will use that initial draft to focus on implementation, evaluation, dissemination, and produce a final manuscript descrbing your project.

Course Assignment to Manuscript Section



Course	Key Assignment(s)	Milestone at Completion of Course
1 HSC.801	EBP Reflection, Learning Plan; Problem of Practice	Problem statement and project purpose
2 HSC.815	PICO Worksheet; Research Critiques	Refined problem and preliminary methods
3 HSC.852	Literature Summary	Complete literature review and search methods
4 HSC.854	Critical Appraisals; Evidence Synthesis	Complete draft manuscript
5 HSC.750	Implementation and Evaluation	Implementation and evaluation plan
6 HSC.856	Dissemination Plan; Final Presentation	Final manuscript, dissemination product, and presentation

Manuscript Template

The manuscript is intended to serve as the central scholarly work product developed throughout the Core Scholarship sequence. You are encouraged to identify a peer-reviewed journal, professional publication, or other dissemination approach that aligns with their professional practice, and to develop their manuscript with that audience in mind.

The following annotated template is intended as a general framework to support the organization and development of the project rather than a prescriptive manuscript format. In consultation with your instructor, you may adapt the structure, section headings, and presentation of content to align with the expectations of their discipline or dissemination venue while ensuring that all essential elements of scholarly inquiry are addressed. The overarching goal is to produce a high-quality evidence-informed product that demonstrates your ability to identify a problem of practice, synthesize relevant evidence, develop actionable recommendations, and translate knowledge into meaningful improvements in practice, systems, programs, policy, and population health.

Paper Title Page

Develop an informative title that clearly identifies the problem, population, intervention, or focus of the project. The title may evolve throughout the sequence as the project becomes more focused. At a minimum, the Title Page will include:

Project Title
Your Full Name
Doctor of Health Sciences Program
Course Number and Title
Faculty Name
Date

1. Introduction

Describe the issue, challenge, gap, or opportunity that serves as the focus of the project.

- *What is the problem?*
- *Why is it important?*
- *How does it affect practice, policy, programs, systems, or populations?*
- *What evidence suggests this problem warrants attention?*

Identify the individuals, groups, organizations, communities, or systems affected by the problem.

- *Who experiences the problem?*
- *What are the consequences?*
- *Are there disparities or equity concerns?*
- *What healthcare, public health, educational, organizational, or policy systems are involved?*

Explain why the problem is important to address.

- *Magnitude of the problem*
- *Practice implications*
- *Organizational implications*
- *Population health implications*
- *Alignment with professional interests and career goals*|

Primarily developed through:

- **HSC.801 Reflection on Evidence-Based Practice**
- **HSC.815 Problem of Practice Paper**

2. Background and Literature Review

Provide a synthesis of the most important literature relevant to the problem.

- *Current evidence*
- *Best practices*
- *Existing interventions*
- *Outcomes reported in the literature*
- *Organized by major themes or patterns*

Primarily developed through:

- **HSC.852 Literature Summary Paper**
- **HSC.852 Literature Search Assignment**

Evaluate the quality and strength of the evidence.

- *Study designs*
- *Methodological strengths*
- *Methodological limitations*
- *Biases*
- *Quality of evidence*
- *Consistency of findings*

Describe what remains unknown or inadequately addressed.

- *Evidence gaps*
- *Practice gaps*
- *Policy gaps*
- *Population gaps*
- *Implementation gaps*

Explain how the project addresses that gap.

Primarily developed through:

- **HSC.815 Qualitative Critique**
- **HSC.815 Quantitative Critique**
- **HSC.854 Critical Appraisal Assignments**

3. Purpose

Provide a concise statement describing the overall purpose of the project. Example: "The purpose of this project is to evaluate the evidence regarding _____ and develop evidence-informed recommendations for _____."

Identify specific objectives.

- *Clear*
- *Measurable*
- *Realistic*

- *Aligned with the identified problem*

Examples:
- *To evaluate available evidence regarding…*
- *To identify best practices for…*
- *To develop recommendations for…*
- *To support implementation of…*

Primarily developed through all assignments in:
- **HSC.801**
- **HSC.815**
- **HSC.852**

4. Methods

Present the final PICO(T) question, describing:
- *Population*
- *Intervention*
- *Comparison*
- *Outcome*
- *Timeframe (if applicable)*

Literature Search Strategy:
- *Databases searched*
- *Search terms*
- *Inclusion criteria*
- *Exclusion criteria*
- *Screening procedures*

Evidence Selection:
- Number of studies reviewed
- Levels of evidence
- Reasons for inclusion

Primarily developed through:
- **HSC.852 PICO Development and Literature Search Worksheet**

5. Results and Recommendations

PICO findings derived from the evidence synthesis.
- Major themes
- Areas of agreement
- Conflicting findings
- Strength of evidence

Consider using subheadings, as appropriate.

Evidence-Based Recommendations based on the evidence. Explain how findings and recommendations address the original purpose and objectives.
- *Supported by literature*

- *Realistic*
- *Actionable*
- *Relevant to the intended audience*

Examples:
- *Clinical recommendations*
- *Administrative recommendations*
- *Educational recommendations*
- *Policy recommendations*
- *Public health recommendations*

Primarily developed through:
- **HSC.854 Synthesis of Evidence Paper**

6. Discussion

Implications for practice and the significance of the findings.
- *Application in Real-World Settings*
- *How can recommendations be applied?*
- *Stakeholder Relevance*
- *Who benefits from implementation?*

Describe potential impacts on:
- *Health outcomes*
- *Quality of care*
- *Healthcare systems*
- *Public health*
- *Equity*

Limitations
- Discuss limitations consider constraints, such as:
  - Time
  - Resources
  - Evidence availability
- What assumptions informed the work?
- What barriers or unintended consequences could occur?

Primarily developed through:
- **HSC.854 Evidence Synthesis**

7. References
- APA 7th edition format
- Peer-reviewed literature, professional authoritative sources as appropriate
- Approximately 15-25 scholarly references

Example Projects

The following examples represent published scholarly products that translate evidence into action through implementation planning, clinical practice guidelines, quality improvement initiatives, educational programs, digital health solutions, and community-based interventions. These examples illustrate the breadth of potential deliverables that may result from the Core Scholarship sequence and demonstrate how evidence-informed scholarship can contribute to manuscripts that describe improvements in healthcare practice, public health, organizational performance, policy, health systems, and population health outcomes. They are intended to provide you with examples of rigorous, application-oriented scholarship rather than a prescriptive list of project types.

Implementation Plan

Powell, B. J., Waltz, T. J., Chinman, M. J., Damschroder, L. J., Smith, J. L., Matthieu, M. M., Proctor, E. K., & Kirchner, J. E. (2015). A refined compilation of implementation strategies: Results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Science, 10*(1), 21. https://doi.org/10.1186/s13012-015-0209-1

Best Practice Guideline

Haynes, A. B., Weiser, T. G., Berry, W. R., Lipsitz, S. R., Breizat, A. H., Dellinger, E. P., Herbosa, T., Joseph, S., Kibatala, P. L., Lapitan, M. C. M., Merry, A. F., Moorthy, K., Reznick, R. K., Taylor, B., & Gawande, A. A. (2009). A surgical safety checklist to reduce morbidity and mortality in a global population. *New England Journal of Medicine, 360*(5), 491-499. https://doi.org/10.1056/NEJMsa0810119

Educational Program

Osei-Twum, J., Wiles, B., Killackey, T., Mahood, Q., Lalloo, C., & Stinson, J. N. (2022). Impact of Project ECHO on patient and community health outcomes: A scoping review. *Academic Medicine, 97*(9), 1393-1402. https://doi.org/10.1097/ACM.0000000000004749

Technology-Supported Solution

Murray, E., Hekler, E. B., Andersson, G., Collins, L. M., Doherty, A., Hollis, C., Rivera, D. E., West, R., & Wyatt, J. C. (2016). Evaluating digital health interventions: Key questions and approaches. *American Journal of Preventive Medicine, 51*(5), 843-851. https://doi.org/10.1016/j.amepre.2016.06.008

Ross, J., Stevenson, F., Dack, C., Pal, K., May, C., Michie, S., Barnard, M., Murray, E., & Stevenson, F. (2018). Developing an implementation strategy for a digital health intervention: An example in routine healthcare. BMC Health Services Research, 18(1), 794. https://doi.org/10.1186/s12913-018-3615-7

Community-Based Intervention

O'Mara-Eves, A., Brunton, G., McDaid, D., Oliver, S., Kavanagh, J., Jamal, F., Matosevic, T., & Thomas, J. (2013). *Community engagement to reduce inequalities in health: A systematic*

review, meta-analysis and economic analysis (Public Health Research, Vol. 1, No. 4). NIHR Journals Library. https://doi.org/10.3310/phr01040

Community-Based Prevention System

Kuklinski, M. R., Oesterle, S., Briney, J. S., & Hawkins, J. D. (2021). Long-term impacts and benefit-cost analysis of the Communities That Care prevention system at age 23, 12 years after baseline. *Prevention Science, 22*(4), 452-463. https://doi.org/10.1007/s11121-021-01218-7

You are encouraged to explore other examples of published scholarship in journals such as *The Milbank Quarterly* that describe how conceptual frameworks, logic models, policy recommendations, implementation strategies, program planning tools, and knowledge translation resources are developed, applied, and disseminated to improve health outcomes and inform evidence-based decision-making.

Supplemental Resources

To support incoming doctoral students from diverse academic and professional backgrounds, a supplemental research methods book has been made available through the MCPHS Library. The text provides an accessible foundation in health research methods and is intended to help students develop familiarity with terminology and readiness for the research expectations of the program before beginning formal research methods coursework. If you have limited or no prior health research methods training, you may find the fundamental principles, terminology, and approaches of health sciences scholarship in the following sections helpful:

Research Stage	Jacobsen (2021) Chapter	Skill
Research Exposure	Ch. 1-7, 34-35	Research; communication basics
Research Depth	Ch. 16-21, 28-32	Methods; analysis
Appraisal	Ch. 8-14, 29-31	Critical evaluation
Synthesis	Ch. 15, 25-26	Evidence integration
Application	Ch. 24-25, 33	Implementation
Dissemination	Ch. 34-42	Scholarly communication

Jacobsen, K. H. (2021). Introduction to Health Research Methods (3rd ed.). https://ebookcentral.proquest.com/lib/mcphs/detail.action?docID=4441620

MCPHS Libraries

The MCPHS Libraries are available to help you find and evaluate additional sources, navigate searching academic and non-academic resources, integrate citation tools into your work, and more. Access the Libraries here: https://www.mcphs.edu/library

You can work directly with a librarian by using the chat box on the website, or request an appointment with your librarian, Assistant Professor Natalie Hutchinson (natalie.Hutchinson@mcphs.edu).