

Medical Problem Solving II

LENGTH OF COURSE: 14 Weeks

Course Overview

How does where you live, determine your health care? What other factors influence access? What ethical issues inevitably arise in medicine and how do they affect what treatments are available, who makes decisions, who has access, and what future advances might include? When and how does medicine become an issue of social justice?

These are some of the questions students in Medical Problem Solving II explore while using and strengthening their problem-solving competencies from MPS I to extend their understanding of the world of medicine and health care.

Like MPS I, the course focuses on case studies; however, they become more complex and go beyond an individual's case to compare and contrast people's experiences with the same body system. MPSII also looks at multidisciplinary healthcare teams and tackling long-term chronic illnesses. Such analysis leads students to identify the factors that determine what medical resources are available within one setting as well as who has access to them. Further, this approach invites students to consider the role of culture, of ethics, and social justice in shaping attitudes toward and understanding medical care and treatments.

The final section of the course brings the Catalyst Exhibition, where students select topics of great personal interest, which they shape into projects aimed at advocacy in their local settings. The majority of the project unfolds within our class community, often bringing opportunities for peer critiques. At the same time, students curate, research, and develop original ideas that reflect an understanding of and new approaches to their topics. The projects culminate in the conference, where students from many classes and schools around the world come together to share their work and learn from and with each other.

GOA courses use a competency-based learning approach in which students build both GOA core competencies and course-specific ones. Throughout the semester, we assess outcomes tied to each competency to track student progress with the goal of students leaving the course able to use and apply these competencies well beyond the final day of the semester.

Pre-requisites

Medical Problem Solving I

Competency-Based Learning

GOA courses use a competency-based learning approach in which students build both GOA core competencies and course-specific ones. Throughout the semester, we assess outcomes tied to each competency to track student progress with the goal of students leaving the course able to use and apply these competencies well beyond the final day of the semester.

GOA Core Competencies

GOA students learn in practical, hands-on ways, which include the following core competencies:

- Collaborate with people who don't share your location.
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Curate and create content relevant to real-world issues.
- Reflect on and take responsibility for your learning and that of others.
- Organize your time and tasks to learn independently.
- Leverage digital tools to support and show your learning.

For detailed outcomes, click here

MPS II Course-Specific Competencies & Outcomes

Apply the problem-solving method.

- You identify learning issues and develop actionable hypotheses to guide your research.
- You critically assess and use research from medical literature to guide solutions and proposals.
- You can build a diagnosis based on observed symptoms and test results.
- You can generate a comprehensive treatment plan.

Evaluate the broader implications of medicine.

- You can identify and /or interpret the impact of social, political, cultural, and/or economic factors on health outcomes.
- You can assess medical cases holistically by addressing the political, cultural, and/or economic factors.
- You identify and consider the needs and constraints of the stakeholder(s).

Course Outline

Week 1	3-day Orientation
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The course begins with a three-day orientation designed to introduce us to one another as well as to refresh essential online learning skills, built during MPS I, and to ensure confidence with Canvas is intact.

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.

DESCRIPTION: This module refreshes the student with the problem-solving method used in MPS I. Additionally, there is a class discussion on the Hippocratic Oath and introduces the major course topics including social justice, ethics, cultural competency, and global issues.

EXAMPLE ASSESSMENT: Students engage with a fictional patient case and assemble a case file, including new terms, along with anatomy, physiology, and pharmacology concepts. Students document case background information and summarize all symptoms and medical tests. Students present 2-3 hypotheses around diagnosis.

Week 4-5

Module 2: Building an Ethical Perspective

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.

DESCRIPTION: Module 2 explores the importance of ethics in medicine. You will look at the four basic principles and how they relate to health care. You will discuss ethical decision-making with your peers. You will make recommendations about ethical scenarios and organ donation.

EXAMPLE ASSESSMENT: Students learn about ethical decision-making and employ a framework in the context of an asynchronous discussion. They consider an example and discuss the key components of the framework: facts, stakeholders, ethical principles in question, and possible solutions.

Week 6-7

Social Justice and Medicine

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.
- Reflect on and take responsibility for your learning and that of others.

DESCRIPTION: In this module, students will be developing their understanding of the importance of Social Justice in the Health Care Setting. You will work through cases that build on the ethical perspective and address social inequalities in health care. You will also start considering ideas for your Catalyst Project. Projects in MPS II will focus on Track 3: Making an Impact in a local community. It will directly incorporate social justice and ethics.

EXAMPLE ASSESSMENT: Students will apply the problem-solving method to a case of their choice and complete a Planning Page, Lab Test Requests, Research, Diagnosis, and Treatment and also present their case during a synchronous Zoom call in a small group.

Week 8	Spring Break
Week 9-10	Global Responsibility and Health Care

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.
- Reflect on and take responsibility for your learning and that of others.

DESCRIPTION: This module focuses on developing a global perspective on health care. In addition to ethics and social justice, we will now address more global challenges in medicine including healthcare systems around the world, universal healthcare, and cultural competency. Students will solve two cases that explore Global Issues. You will also explore resources for your Catalyst project.

EXAMPLE ASSESSMENT: Students will participate in a discussion on global health equity. Students will solve a case using the problem-solving method: complete a Planning Page, Lab Test Request, Research, Diagnosis, and Treatment, and present their case during a Zoom call.

Week 11-12 | Collaboration with Specialists

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.
- Reflect on and take responsibility for your learning and that of others.

DESCRIPTION: Collaboration is an essential part of Medicine, from working within a medical practice with colleagues and staff to using the expertise from other specialties to treat the patient. Students will dig deep into the role of specialists (what additional training is required? Do they work in a hospital only or have an outpatient office as well). Students will take on the role of a General Practitioner who first sees patients as well as a specialist.

EXAMPLE ASSESSMENT: Students will participate in a discussion about medical specialization and then solve a case. They will first work in the role of a general physician do a Planning page and refer their patient to a specialist. They will do the Research, Diagnosis, and Treatment for a case that was referred to them as they work in the role of a specialist. They will present their case during a synchronous Zoom call in small groups.

Week 13-14 | Multidisciplinary Team Medicine

COMPETENCIES:

- Apply the problem-solving method.
- Evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.
- Reflect on and take responsibility for your learning and that of others.

DESCRIPTION: In this module, students explore complex cases that often require a team of health providers working together usually over a long period to treat the patient. Students will work as members of a multidisciplinary team. (MDT). A successful multidisciplinary team works to make the most comprehensive assessment of a patient's situation and to follow it up with a full-range plan of treatment. Often patients referred to an MDT have complex or chronic illnesses or diseases with a genetic component or cancer. Students will also produce a draft for the Catalyst project.

EXAMPLE ASSESSMENT: Students will participate in two MDT meetings. The first will be to assign roles for the MDT Team and choose a complex case. Students will then research their role as well as the case. In the second meeting, they will make the best suggestions for long-term patient care.

Week 15-16

Catalyst Exhibition and Final Course Collage

COMPETENCIES:

- evaluate the broader implications of medicine
- Communicate and empathize with people who have perspectives and experiences different from your own.
- Organize your time and tasks to learn independently.

DESCRIPTION: The final module will focus on a look forward to the future of medicine and a look back on the work we have accomplished this semester. Students also participate in the Catalyst Exhibition.

EXAMPLE ASSESSMENT:

Students will submit their Catalyst Presentation, participate in a cross-disciplinary learning experience via the Catalyst Exhibition, and submit a final collage of course highlights.