# Syllabus

**Course Title:** AI for Problem-Solving in Healthcare Management

**Program and Date**: London Winter (December 26, 2026 – January 7, 2027)

**Instructor Name:** Dr. John D. (Jack) Rudnick, Jr.

**Instructor Home Institution:** Thomas More University

**Instructor Email and Phone:** rudnicj@thomasmore.edu 859-760-9009

**Academic Department:** Department of Business Administration

**Get to Know Your Professor**

My career in healthcare leadership spans more than fifty years, including service in the United States Navy and work in a variety of healthcare administration and performance improvement roles focused on improving organizational effectiveness and patient outcomes. Since 2002, I have taught at Thomas More University, where I enjoy helping students connect real-world experience with emerging technologies and practical problem-solving approaches. I grew up in Boston and pursued higher education at Providence College, The George Washington University, and Argosy University (formerly the University of Sarasota). I enjoy academic writing and research, which has opened unexpected and rewarding opportunities to present scholarly papers and participate in seminars internationally, including in Canada, Mexico, Italy, Prague, and Greece. Study abroad teaching has been especially rewarding to me; I previously taught for CCSA programs in both London and Dublin and value the transformative learning that occurs when students engage directly with global environments. I look forward to sharing my professional experiences, global perspectives, and enthusiasm for lifelong learning as we explore how artificial intelligence and human-centered problem-solving can help improve healthcare systems around the world.

**Course Description**

This course introduces AI-enabled decision-making and practical problem-solving tools applicable across healthcare, business, STEM, and public health fields. Using London as a foundational learning environment, students compare the United Kingdom's National Health Service with the United States healthcare system through site visits, guided observations, and experiential learning activities. Students explore, critically think, reflect, and evaluate how organizational structure, public policy, and cultural context influence health outcomes. Foundational concepts in artificial intelligence, augmented intelligence, data science, cloud computing, and systems thinking are introduced as tools for addressing complex real-world challenges. The course culminates in an innovative collaborative project in which students synthesize pre-departure preparation with in-country experiences to design and present a data-informed healthcare solution.

# Syllabus

### Course Level and Credit Hours

Upper Division Undergraduate (Graduate option available)
Three Credit Hours

### Prerequisite(s)

None required. Recommended: introductory healthcare, business, statistics, or instructor permission.

### Student Learning Outcomes

Upon completion of all coursework with a passing grade and full participation in course activities, students shall be able to:

- Analyze structural, policy, and cultural differences between the United Kingdom's National Health Service and the United States healthcare system using evidence gathered through field observations and experiential learning activities.
- Evaluate how artificial intelligence, augmented intelligence, data science, and cloud-based tools support decision-making and problem-solving within complex healthcare environments.
- Apply and integrate systems thinking and foundational analytical frameworks to investigate real-world healthcare challenges, demonstrating critical thinking and data-informed reasoning skills valued by employers.
- Collaborate to design and justify an innovative, data-informed healthcare solution that synthesizes pre-departure preparation with in-country learning experiences, demonstrating professional communication, teamwork, and project development competencies.
- Synthesize experiential insights and interdisciplinary knowledge to communicate evidence-based recommendations through written, visual, and oral presentations that reflect ethical awareness, global perspective, and employer-ready professional skills.

### Required Readings and Materials

Pre-departure readings introduce healthcare systems, artificial intelligence basics, and problem-solving concepts. Most readings are completed before travel, with short contextual readings assigned onsite as needed.
Students must bring a laptop computer. No programming or technical background is required.

### Assignments and Grades

Pre-Departure Work (15%): Healthcare Systems Brief and AI Reflection.
Onsite Learning (55%): Reflective field journal, field observation analysis, discussion activities, and participation.
Final Innovation Challenge (30%): Team/ individual healthcare solution proposal and presentation.

# Syllabus

Graduate students complete an additional analytical paper demonstrating deeper research integration.

**Grading Scale**

The following scale will be used to compute your grade.

A = 93–100%
A– = 90–92%
B+ = 87–89%
B = 83–86%
B– = 80–82%
C+ = 77–79%
C = 73–76%
C– = 70–72%
D = 60–69%
F = Below 60%

**Onsite Learning Experiences and Activities**

Onsite learning experiences in this class will likely include the following site visits. This is a tentative list which will be replaced with a detailed daily itinerary of class meetings and field trips prior to the departure date.

- NHS hospital (St. Thomas) visit exploring technology and patient flow
- Community health clinic visit focusing on access and equity
- John Snow cholera site public health walking tour
- Guest session with healthcare innovation professionals
- Health technology or innovation hub visit
- Comparative UK–US healthcare discussion session
- Team collaboration sessions for innovation challenge
- Foundling Museum and Florence Nightengale Museum visits

**Attendance Policy**

Attendance is mandatory at all scheduled activities and class meetings as well as field trip excursions. This includes any virtual meetings before and after the onsite experience. Repeated absences, including ill health, will require documentation to be excused.

# Syllabus

**Academic Integrity Policy**
Academic dishonesty, including plagiarism or misuse of AI tools, will not be tolerated and may result in failing assignment grades or a course grade of F. Violations will be reported to the student's home institution.

**Physical Expectations**
Program requires walking 3-5 miles per day on uneven pavement in all kinds of weather and long periods of standing. Students must be able to carry their own bags and belongings.

**Disability Accommodation**

CCSA is committed to providing access to education abroad to the extent possible in a study abroad setting. The earlier CCSA and the faculty know the needs, the more likely we can accommodate them. At a minimum, students seeking accommodations are to contact both the CCSA office and the faculty one month in advance of the program's beginning. Students seeking such accommodation must provide CCSA with a copy of the letter on file with their own Office of Disability Services outlining what services they receive on their home campus.

**Title IX Policy**

Sexual misconduct (including sexual harassment, sexual assault, and any nonconsensual behavior of a sexual nature) and sexual discrimination violate CCSA policies. Students experiencing such behavior may obtain support from the Onsite Program Director or the CCSA Executive Director. To report sexual misconduct or sex discrimination, contact either of these two officers. Disclosure to faculty instructors or CCSA officers of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on the program or involving a visitor, student or employee is not confidential under Title IX. Faculty and other CCSA employees are required to forward such reports, including names and circumstances, to the CCSA Executive Director.

**Statement about Final Syllabus**

Please note that all CCSA syllabi are subject to change, but every effort will be made to ensure participants receive notice of such changes in a timely manner.