The Medical Technologies in Developing Countries course provides students the unique opportunity to inform the design and launch of medical technologies for developing countries by conducting in-country market research. The students' findings will be shared with the developers of the medical technologies, including Northwestern University and several companies and philanthropists.

Prior market research trips have taken place in India, Kenya, Mozambique, Tanzania, Uganda, Malawi and Zambia, each with a focus on medical technologies such as HIV tests, tuberculosis tests, and technologies for newborn health.

Students will spend the second five weeks of Winter Quarter in the classroom learning the background on medical technologies under development for these markets; the essentials for conducting medical product market research in these geographies; the basic economics, culture, and politics of the country of interest; and the fundamentals of the country's healthcare system.

Following this initial coursework, students will spend two weeks on the ground understanding how the medical technologies are financed by meeting with key stakeholders in the market, including: end-users and administrators at hospitals, lenders, and local distributors. Students will be placed in groups where they will work to research the following questions:

- Who is financing medical equipment in hospitals? What are the common terms?
- What financing opportunities and challenges remain for hospitals and distributors?

After the field work, students will then return for five weeks in the classroom in Spring Quarter where they will learn to analyze their field work, synthesize key findings and provide financing recommendations to the developers of these medical technologies.

**Admittance to this course is by application only.**

Attendance to every class session is mandatory. If you miss one or more sessions, your grade may be deducted by one letter grade.

Your accepted application for this class will also ensure that you will be enrolled in KPPI-973-5 in Spring Quarter. Students may not drop after the first week of the class.

One credit course
Meets 6:30-9:30 pm
Monday, Winter Part B begins February 11, 2020
Thursday, Spring Part A classes begin on April 2, 2020

You will need to take early exams on March 14 and 15 to accommodate the trip. The required travel for this course will take place in between the Winter and Spring quarters. Exact dates and locations TBD but most likely Tanzania / Kenya, March 15 – March 29
Financial aid will be available to cover the travel expenses.

You do not need to do anything in the bidding system, unless you need to drop a course to fit this one in. Please let us know ASAP if you no longer can fit this course into your Winter and Spring schedule.

**Class 1: Introduction - What are babies living with and dying of in developing countries?**

**Monday, February 11, 2020, 6:30-9:30 PM**

Discussion about Group Assignments and Committees; Lecture on Africa, tools to assess the healthcare capacity and burden of disease in Africa

Assignments for Class 1:
- Read Executive Summary of the NEST Project
- Read “4 million neonatal deaths: When? Where? Why?” article by NEST team member, Joy Lawn
- Skim “Situation analysis of newborn health”
- Kenya and Tanzania Market Assessments

Guest Speaker:
- Introduction to NEST (Becca Kirby)
- Introduction to Tanzania and Kenya through NEST Market Assessments (Archit Gupta and Melissa Maggart)

**Class 2: Newborn Care in Low- and Middle-income Countries**

**Monday, February 17, 2020, 6:30-9:30 PM**

Overview of newborn care in low- and middle-income countries, disease prevention, diagnosis, therapy and monitoring

Guest Speaker: [Dr. Janine Khan](#)

Assignments for Class 2:
- Read “New technologies for essential newborn care in under-resourced areas: what is needed and how to deliver it”
- Read “The nursery of the future”

**Class 3: The Hospital Administrator and Lender Perspective**

**Monday, February 24, 2020, 6:30-9:30 PM**

Assignments for Class 3:
- Assignment #1: Each NEST Team will need to have some working knowledge of healthcare systems and their respective stakeholder groups prior to arriving in country.
  1. Develop an initial list of questions you have about your NEST team.
  2. Begin conducting secondary research (literature reviews) to see if you can answer any of these questions.
  3. Develop a list of organizations/people you want to meet with in country to further answer your questions.
Guest Speaker: Varsay Sirleaf, CEO of Snapper Hill Clinic

An electronic copy of this assignment will be due at the beginning of class.

**Class 4: The Medical Device Distributor Perspective**

**Monday, March 2, 2020, 6:30 - 9:30 PM**

Assignments for Class 4:
- Practice your first draft of your field guide

Assignments:
- Complete First Draft of Field Guide
  An electronic copy of this assignment will be due at the beginning of class. You will present this assignment in class with your peers.

Guest Speaker: Danica Kumara, Product Manager, Medical Devices | 3rd Stone Design

**Class 5: Final Preparation for Trip**
**Monday, March 9, 2020, 6:30 - 9:30 PM**

Assignments:
- Final draft of Field Guide due Friday
- Continue research into stakeholders and seek to secure appointments
- Interview Guide Review with Rob/Kara and between groups

**Travel**
**March 15-29, 2020**

**Class 6: Trip Reflections and Synthesis, Part 1**
**Thursday, April 2, 2020, 6:30 - 9:30 PM**

Assignments:
- Draft outline for Presentation and Paper
- Teams share draft outlines
- Review research objectives and data collected to find gaps that require follow-up

**Class 7: Synthesis, Part II**
**Thursday, April 9, 2020, 6:30 - 9:30 PM**

Guest Speaker: Grant Harris, CEO Harris Africa Partners LLC

- Consolidate market research inputs from all team members, assess gaps and inconsistencies and discuss presentation format

**Class 8: Draft Presentations**
**Thursday, April 16, 2020, 6:30 - 9:30 PM**

- Complete draft presentation for review and comments by Rob/Kara
Class 9: Final Presentations  
Thursday, April 23, 2020, 6:30 - 9:30 PM
• We will be presenting our work to each other and a number of key stakeholders (companies, foundations, and other non-profits).

Class 10: Final Presentations  
Thursday, April 30, 2020, 6:30 - 9:30 PM
No Class

Students can find useful resources for safety and security, academic support, and mental and physical health and well-being on the NU help website and app.