COCA Standard 6

6.5-2 Provide a curriculum map demonstrating how the content of these courses is delivered. **Scientific Method**

	OMS 1 Pre-Clinical	OMS 2 Pre-Clinical	OMS 3 Clinical	OMS 4 Clinical
Instruction in scientific method	Lectures in biostatistics, the IRB process and bioethics are taught in the following courses/blocks in the 1st year: ISOM FOM 1 FOM 2 FOM 3 FOM 4 ISSM 1 ISSM 2 Instructional Methods: This content was delivered via virtual live, Zoom and pre-recorded lectures, online modules, small group sessions, and workshops. Assessment: This knowledge was assessed primarily through didactic exams.	Lectures in biostatistics, the IRB process and bioethics are taught in the following course/blocks om the 2nd year: ASOM FOM 5 FOM 6 FOM 7 FOM 8 Instructional Methods: This content was delivered via virtual live, Zoom and pre-recorded lectures, online modules, small group sessions, and workshops. Assessment: This knowledge was assessed primarily through didactic exams.	Independent identification and reading of peer-reviewed articles in the medical literature. Read a case scenario and describe the study design and its validity, relevance to the case and significance to the body of literature on the subject. Students are also asked to formulate a question on their own and record how they would explain the findings to the patient. ISSM 5 Instructional Methods: The instruction of this content was primarily application based and self-directed and was reinforced via rotation experiences. Assessment: The application of this knowledge was assessed through assignments, preceptor evaluation,	Independent identification and reading of peer-reviewed articles in the medical literature. ISSM 6 Instructional Methods: The instruction of this content was primarily application based and self-directed and was reinforced via rotation experiences. Assessment: The application of this knowledge was assessed through assignments, preceptor evaluation, COMAT and COMLEX exams.

			COMAT and COMLEX exams.	
Optional experiences	Longitudinal research track; participation in student and professional colloquia	Longitudinal research track; participation in student and professional colloquia	Research rotations; participation in student and professional colloquia	Research rotations; participation in student and professional colloquia

The section below lists the various learning activities from the 2020/2021 academic year by course/block at COMP/COMP-Northwest that meet the following criteria:

- includes instruction in the scientific method
- include data collection to test and verify hypotheses
- address questions regarding biomedical phenomena
- basic scientific and ethical principles of clinical and translational research
- include methods by which research is conducted, evaluated, explained to patients who are part of clinical studies and applied to patient care

ISOM

- Literature Searching Workshop – 2 hrs
- Introduction to Evidence-based Medicine – 1 hr
- Introduction to Scientific Literacy – 1 hr
- Biostatistics Workshop – 2 hrs
- Study Design Workshop – 0.5 hrs
- The Restless Dead – 2 hrs

FOM 1

- Basic Principles of Ethics and Process of Ethical Analysis – 2 hrs
- Human Personhood and Patient as Person – 2 hrs
- Hypothesis Testing and Errors – 2 hrs

FOM 2

- Child Abuse - ACE Studies – 2.5 hrs
- Correlation and Regression – 1 hr

FOM 3

- Social Medicine - Human Subject Research Ethics – 1 hr
- Social Medicine - The IRB Process – 1 hr
- Social Medicine - Organ Donation – 1 hr
- Research Methods and Searching for Evidence – 2 hrs
- Biochemistry - Biomarkers of Urine (Creatinine) – 1 hr
- Workshop Pathophysiology - Vascular Control of Blood Flow - Student Presentations – 2 hrs

FOM 4

- OPP Research – 2 hrs
- Biostatistics in Medical Decision Making – 2 hrs
- Biostatistics - Epidemiology / Life Span – 2 hrs
- DEI – Genetics – 1 hr

ASOM

- Epidemiology of Infectious Disease – 1 hr

FOM 5

- Non-Parametric and Distribution-Free Testing – 1 hr

FOM 6

- Medical Ethics - Protection of Vulnerable Persons - Past and Present – 1 hr
- Biostats – 1 hr
- The Restless Dead – 2 hrs
- The Restless Dead Follow-up Discussion – 1 hr

FOM 7

- Biostatistics - Medical Decision-Making – 1 hr
- Biostatistics - Epidemiology of Outbreak and Risk Assessment – 1 hr

FOM 8

- Biostatistics Workshop – 2 hrs
- Forensic Psychiatry and Ethics – 2 hrs

ISSM 1-4

- Research Mixer – 2 hrs
- Research - Biohacking COVID-19 Testing – 1 hr
- Research Ethics in Global Health – 1 hr
- How to Present Research – 1 hr
- The Problem with Race-Based Medicine – 1 hr

ISSM 5

- Assignment #3: Reading the medical literature (from the ISSM 5 syllabus)
  - Using the rotation syllabus or as directed by your preceptor, identify *five* different medical topics not seen, discussed, or covered well during the rotation and read at least *two* peer-reviewed articles or textbook chapters on each of the five (5) topics.
  - Students should list articles (etc.) read in a reading log and be prepared to submit this to ISSM 5 faculty/staff upon request. Some rotations already require a reading log, and this can also be used for ISSM 5 documentation if requested.

- First quarter special assignment: Form clinical questions and retrieve evidence to advance patient care (EPA 7) (from the ISSM 5 syllabus)
  - There are three parts to the assignment: 1. Background questions, 2. Case review and questions, and 3. Short oral presentation.

ISSM 6

- Evaluating Clinical Literature and Self-Directed Learning (from the ISSM 6 syllabus and "instructions for evaluation of clinical literature and Self-Directed Learning")
  - Students must complete a minimum of 50 hours of independent study: Self-Directed Learning/CME Activities to meet ISSM 6 course requirements.
  - Article/book chapter reading can be completed as part of your rotations or as you choose based on your interest and specialty selection. Articles/book chapters should be peer-reviewed.