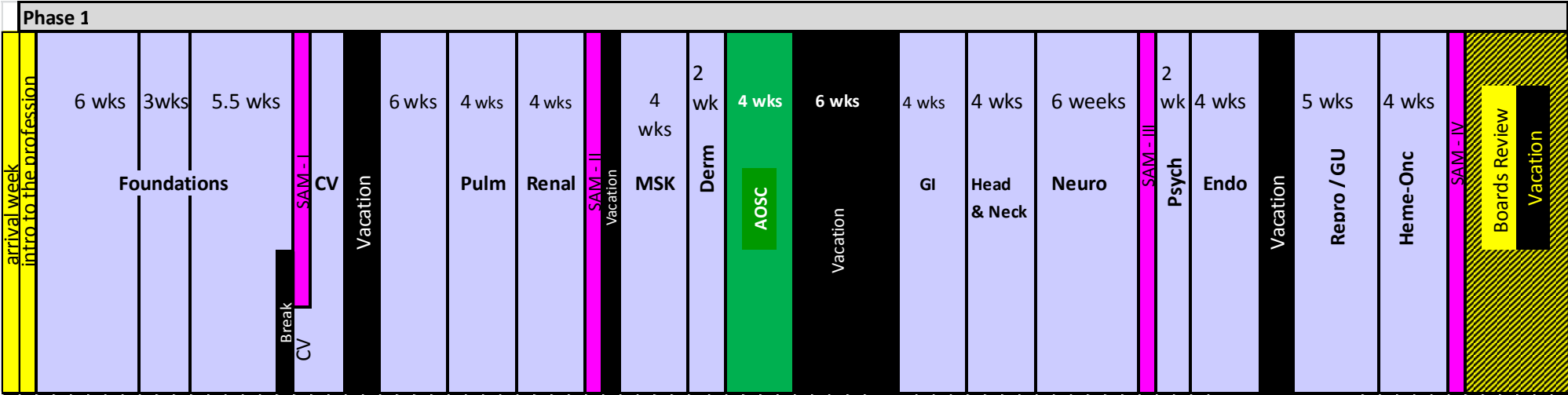


Supplemental Digital Appendix 1: New Curriculum Schedule at the Northwestern University Feinberg School of Medicine, by Phase



**Phase 1** consists of approximately 18 months of organ-based modules interspersed with synthesis and application modules (SAMs), which enable spaced repetition.

Musculoskeletal Medicine, Week 3 of 4					
	Mon 4/24/17	Tues 4/25/17	Weds 4/26/17	Thurs 4/27/17	Fri 4/28/17
8:00 AM	Clinical Medicine (CM) : Clinical Correlation : Patients with Disabilities	SM : Peripheral Neuropathies of the Upper Limb	Health and Society (HS) : Reflections on a Rehabilitation Journey Empathy, Privacy, Respect of Disabled Patients	SM : Inherited Disorders of Connective Tissue	
9:00 AM		SM : Functional Anatomy of the Lower Limb (gait)		SM : Scleroderma	Plenary: Review Session
10:00 AM	Science in Medicine (SM) : Pediatric Musculoskeletal	SM : Spondyloarthropathies	SM : Joint Replacement	Anatomy Lab: Joints of the Lower Limb	SM : Pain Pharmacology #3 - Opioids, NSAIDs
11:00 AM	SM: Crystalline Diseases	SM : Pediatric Rheumatology	SM : Back Pain		PD : Area of Scholarly Concentration small groups
12:00 PM	Professional Development (PD): College Meeting				
1:00 PM	Problem-Based Learning (PBL)	CM: Interviewing Patients with Disabilities/ Special Exam	PBL		
2:00 PM		CM Individual Preceptorship or Education Centered Medical Home			
3:00 PM	PD: Narrative Ethics and Spinal Cord Injuries				
4:00 PM					
5:00 PM					

To the left is a representative work week in phase 1. Science in medicine content is purple, clinical medicine content is pink, professional development content is green, and health and society content is blue. Integrated content is yellow.

Phase 2													Phase 3																		
	block 1	block 2	block 3	block 4		block 5	block 6	block 7	block 8		block 9	block 10	block 1 1	block 12		block 13	block 14	block 15	block 16		block 17	block 18	block 19	block 20		block 21	block 22	block 23	block 24	block 25	
Intro to Phase 2	Medicine	Surgery		SAM	flex time	Ob-Gyn	elective	Psychiatry	Vacation	Area of Scholarly Concentration	Neurology	flex time	Pediatrics	Intro to Phase 3	Emergency Medicine	Primary Care	elective	Subinternship	Career Exploration	elective	Physical Medicine and	Critical Care	flex time	flex time	Vacation	elective	flex time	elective	flex time	capstone	Graduation

**Phases 2 and 3** total approximately 23 months. By the end of phase 3, students must complete 40 weeks of required clerkships (surgery, medicine, pediatrics, obstetrics and gynecology, psychiatry, neurology, and primary care); 14 weeks of advanced clerkships (emergency medicine, subinternship, critical care and physical medicine, and rehabilitation); 5 weeks of electives (inclusive of research and the area of scholarly concentration); and a culminating two-week capstone course. There is not a strict time-based based demarcation between phases 2 and 3. Students have the flexibility to schedule electives, research time, and flex-time (vacation) according to their career development needs. This flexibility enables them to explore early electives and complete research projects prior to submitting an application for residency. SAMs and Introductions to the Phase provide opportunities to incorporate nonclinical curricular elements. Each “block” above is four weeks.

## Supplemental Digital Appendix 2

### Description of the Survey Instruments Used to Assess Student Preparedness, Comparing the Former Curriculum (FC) and the Current Curriculum (CC) at the Northwestern University Feinberg School of Medicine

	Clinical skills preparation survey	Student perception survey
Description	Annual survey administered to students after first month of clerkships. Asks students how well the pre-clerkship curriculum prepared them for their first clinical rotation on a 5-point scale (1=not prepared at all; 5=extremely well prepared).	Annual survey administered each fall to all currently enrolled FSM students since 1993. The survey asks students to report how confident they are in their ability to fulfill the educational goals of the medical school on a 5-point scale (1=not confident; 5=very confident).
FC cohort administration & response rate	Administered August 2013 Response rate = 92%	Administered fall 2013 Response rate = 88%
CC cohort administration & response rate	Administered June 2014 Response rate = 90%	Administered fall 2014 Response rate = 50%
Methods described in the literature	Heiman HL, O'Brien CL, Butter J, Uchida T, Yelen M, Garcia PM. Ready to reason: integration of clinical education and basic science improves medical students' self-assessed clinical reasoning before clerkships. Med Sci Educ. 2015;25:513-519.	Makoul G, Winter RJ. The student perception survey: A tool for assessing medical school curricula. Acad Med. 1997;72:410-411.  Makoul G, Curry RH, Thompson JA. Gauging the outcomes of change in a new medical curriculum: Students' perceptions of progress toward educational goals. Acad Med. 2000;75:S102-S105.