Topics Covered in Fellow’s Curriculum

1. MSK Radiology Rounds with Clinical Case Presentations
   a. Ankle Injuries
   b. Classification of Meniscal Injuries
   c. Muscle Strains and Tears
   d. Throwing Injuries of the Elbow
   e. Posterolateral Corner Injuries
   f. Hyperextension Injuries of the Knee
   g. Patellar dislocation and Patellofemoral Dysplasia
   h. Shoulder Injuries
   i. Femoral Acetabular Impingement
   j. Cruciate Ligament Injuries

2. Quarterly Journal Club

3. Sports Nutrition
   a. Basics review of Carb/Pro/Fat
   b. Mineral/vitamin/micronutrient
   c. Hydration - Before, during, and after
   d. Food record basics and rapid calculations
   e. Energy expenditure and caloric needs
   f. Fad diets
   g. Sports Nutrition products - gels, bars, drinks
   h. Special sports topics - female athlete, carbo loading
   i. Ergogenics and supplements
   j. Pediatric issues
   k. Body composition
      i. Measurement individually and populations
      ii. Pediatric issues

4. Physiology
   a. Environmental Issues in Sports
      i. Heat
      ii. Altitude
      iii. Cold
      iv. Diving
      v. Pediatric issues
   b. Muscle physiology
      i. Cellular anatomy and applied physiology -
      ii. Neuromuscular aspects
         1. Peripheral fatigue
         2. Autonomic controls
      iii. Biochemistry of energy metabolism basics
      iv. Fiber types and related energy metabolism differences
      v. Affects of training at the muscular level
      vi. Strength versus endurance
         1. Pediatric issues
   c. Physiologic responses to bouts of exercise
i. Cardiac
ii. Vascular
iii. Pulmonary
d. VO2 max concept
   i. GXT
   ii. Use in exercise prescription
   iii. Application to caloric expenditure
   iv. RPE application
e. Central fatigue

5. Fellow’s conference- review of Reider’s Orthopaedic Physical Exam text presented as Power Point to faculty and rotators
   a. Chapter 7 Lower leg, Ankle, and Foot
   b. Chapter 6 Knee
   c. Chapter 9 Low Back
   d. Chapter 2 Shoulder
   e. Chapter 5 Hip and Pelvis
   f. Chapter 3 Elbow and Forearm
   g. Chapter 4 Hand and Wrist

6. Didactic Lectures
   a. Physical Therapy
      i. Modalities and Rehabilitation
      ii. Core Strength and Stability
      iii. Orthotics Prescription and Efficacy
      iv. Sacroiliac/Lumbar Mechanics
   b. Medical Topics
      i. Concussion
      ii. The Female Athlete
      iii. The Pediatric Athlete
      iv. Care of the Athlete with Pulmonary Complaints
      v. Sports Cardiology- Evaluation of the Athletes to Prevent Sudden Death
      vi. The Geriatric Athlete
      vii. Sports Psychology
      viii. Sports Dermatology.
      ix. Sports Related Ophthalmology
      x. Sports Dental Injuries
      xi. NSAIDS pharmacology
   c. Special Topics
      i. Running Injuries and Gait Analysis
      ii. Special Olympics Athlete
      iii. Legal and Ethical Issues in Sports Medicine
      iv. Bone, Muscle and Cartilage Injury in the Growing Athlete

7. Attending Lectures
   a. Acute and Chronic Ankle
   b. Acute and Chronic Knee
c. Acute and Chronic Shoulder
d. Acute and Chronic Hip
e. Acute and Chronic Back
f. Acute and Chronic Elbow
g. Acute and Chronic Hand and Wrist
h. Pre-participation Sports Evaluation