Tentative Syllabus for PA 616 – Clinical Medicine III

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COURSE DESCRIPTION
The student will build upon the knowledge and skills attained in Clinical Medicine II to study the following modules: endocrine, nutritional disorders, nephrology, urology, men’s health, women’s health, gynecology, obstetrics, pediatrics, rheumatology, and orthopedics. This is part three of a series of three courses in the study of medicine that will be taught in a modular format utilizing a combination of lecture and interactive techniques. It is designed to explore the common medical and surgical disorders encountered in general adult medicine. This will include: clinical presentation, acute care, etiology, pathophysiology, prevention, genetic involvement, diagnostic work-up, lab interpretation, appropriate referral, and management of disorders pertaining to the listed modules. Students will develop a deeper curiosity about the art and science of clinical medicine, a passion about the field of medicine, and perfect the skills of self-directed learning.

LEARNING OBJECTIVES
Upon completion of this series of courses, each student should be able to:
1. Understand and reasonably discuss the clinical elements of a broad range of topics, using both cellular and holistic terms.
2. Evaluate resources for exploration of topics and issues pertinent to current clinical practice.
3. Efficiently formulate a strategy for researching the clinical elements of topics pertinent to PA practice.
4. Demonstrate effective tactics for researching the underlying clinical elements of topics pertinent to PA practice.
5. Correctly recall or define clinical elements of topics and systems covered during this course.
6. Compare and contrast data and concepts of clinical elements of topics covered during this course.
7. Collaborate with colleagues to formulate conclusions using evidence-based principles.
8. Build foundational knowledge and basic understanding of each of the topics listed in the syllabus.
9. Develop basic critical thinking skills necessary to evaluate a patient with specific signs and symptoms and formulate a differential diagnosis.
10. Demonstrate an understanding of the interdisciplinary nature of medicine.
11. Develop skills in teamwork necessary to function as a member of a functioning healthcare team.
12. Develop an emerging understanding of the importance of empathy and social skills in the practice of medicine.
13. Be able to analyze a clinical vignette in case study format and draw conclusions.

Accomplish objectives in the following modules:
Endocrinology Module:
- Differentiate and describe the etiology, presenting symptoms, diagnostic workup, laboratory findings, patient education, common complications, and disease management for the following endocrine conditions: hypopituitarism, diabetes insipidus, diabetes mellitus Type I and Type II, Insulin resistance, metabolic syndrome, hypoglycemia, hyperglycemia, acromegaly, gigantism, dwarfism, adrenal disorders, pheochromocytoma, hyperprolactinemia, thyroid cancer, endemic goiter, hypothyroidism, myxedema, hyperthyroidism, thyroiditis, thyroid nodule, pituitary adenomas, hypoparathyroidism, pseudohypoparathyroidism, hyperparathyroidism, osteoporosis, osteomalacia, Paget’s disease of bone, adrenocortical insufficiency, islet cell tumors, Cushing’s
syndrome, Addison’s disease, hirsutism, hypogonadism, hypercalcemia, hypocalcaemia, and hyperaldosteronism.

- Combine historical, physical exam findings and ancillary testing to formulate an appropriate differential diagnosis/treatment plan and disposition of the previous conditions.
- Contrast between and select appropriate pharmacotherapeutic intervention as relates to the previous conditions listed.
- Recommend and debate the appropriate diagnostic protocol to be used for an individual with a thyroid nodule found on physical examination.
- Distinguish and differentiate between toxic multi-nodular goiter, non-toxic multi-nodular goiter, Hashimoto's thyroiditis, sub-acute thyroiditis and Grave's disease in terms of etiology, associated signs and symptoms, and treatment.
- Review and distinguish between mineralocorticoids (e.g., aldosterone), glucocorticoids (e.g., cortisol), androgens (e.g., estrogen, progesterone), and catecholamines (e.g., epinephrine) in terms of synthesis site and general action.
- Distinguish the clinical manifestations of overt diabetes, ketoacidosis and insulin reaction.
- Realize and specify the effects of insulin deficiency on CHO, protein, and fat metabolism.
- Measure and determine the onset, peak action and duration (in hours) of regular, Lente and NPH insulin.
- Choose and judge appropriate management of a newly diagnosed IDDM patient to include therapy and dietary principles.
- Recommend the appropriate therapeutic principles for a newly diagnosed NIDDM patient.
- Diagnose the Somogyi effect.
- Select and interpret laboratory testing appropriate to the evaluation of a patient with endocrine disorders including thyroid stimulating hormone, free T3, free T4, prolactin, follicular stimulating hormone, luteinizing hormone, adrenocorticotropic hormone, growth stimulating hormone, parathyroid hormone, insulin, glucose, electrolytes, HgbA1C (hemoglobin A1C), testosterone (total/free).
- Develop a diagnostic plan and differential diagnosis for: obesity, weight loss/gain, abnormal skin pigmentation, gynecomastia, galactorrhea, erectile dysfunction and decreased libido in men, cryptorchism, bone pain and pathologic fractures, and muscle cramps and tetany.
- Explain body mass index including its calculation and potential limitations.
- Develop counseling strategies, both pharmacologic and non-pharmacologic, to assist patients in the control of a healthy weight.
- Evaluate and present case studies of patients’ endocrine disorders, demonstrating an understanding of pertinent history, physical examination findings, pertinent diagnostic studies, appropriate treatment plan and patient education.

Nephrology and Nutrition Module:

- Define elements of nutritional assessment and diet with respect to their clinical significance.
- Describe and discuss elements of commonly prescribed diets such as the ADA and AHA diets.
- Describe the elements of nutritional assessment related to: amino acids & proteins, carbohydrates, lipids, vitamins, minerals, and specialty diets.
- Discuss the benefits and risks from common diets such as the South Beach and Atkins’ diets.
- Discuss the benefits and risks of commonly available nutritional supplements.
- Discuss the treatment plan for common nutritional disorders.
- Discuss and describe the following with respect to their etiologies, epidemiology, clinical presentation, diagnostic test findings, treatments and prognosis: disorders of sodium concentration,
IgA nephropathy, disorders of potassium concentration, disorders of calcium concentration, disorders of magnesium concentration, hyperosmolar disorders, acid-base disorders, respiratory acidosis/alkalosis, metabolic acidosis/alkalosis, normal anion gap acidosis, increased and decreased anion gap acidosis, acute renal failure, chronic renal failure, renal artery stenosis, interstitial nephritis, glomerulonephropathies, nephrotic disease in primary renal disorders, nephrotic disease from systemic disorders, pyelonephritis, nephrolithiasis, drug induced nephrothapcy, tubule-interstitial disease, cystic diseases of kidney, UTI’s, cystitis, pyelonephritis, hyper- and hyponatremia, hyperkalemia and hypokalemia, and hyperaldosteronism.

• Identify components of the history and physical exam appropriate to the development of a differential diagnosis in the patient with renal disorder.

• Develop a diagnostic plan and differential diagnosis for: oliguria, polyuria, proteinuria, and hematuria.

• Select and interpret laboratory testing appropriate to the evaluation of a patient with renal disorder including urinalysis with microscopic examination and culture/sensitivity, specific gravity, fractional excretion of sodium, urine sodium, urine/plasma osmolality, 24-hr. urine collections, glomerular filtration rate and creatinine clearance, evaluation of BUN/creatinine, performance of correction calculations in electrolyte evaluations.

• Select and interpret the results of appropriate diagnostic imaging studies including plain radiographs, intravenous pyelogram, helical CT kidney-ureter-bladder (KUB), and ultrasound studies.

• Differentiate between nephritic and nephritic syndromes.

• Explain the indications for and techniques used in dialysis.

• Combine historical, physical exam findings and ancillary testing to formulate an appropriate differential diagnosis/treatment plan and disposition of the previous conditions.

• Evaluate and present case studies of patient’s renal disorders, demonstrating an understanding of pertinent history, physical examination findings, pertinent diagnostic studies, appropriate treatment plan and patient education.

• Recognize pharmacologic/non-pharmacologic approaches which are used to slow the progression of renal disease, i.e., corticosteroids, BP control, BS control in DM, avoidance of nephrotoxic drugs, fluid balance, dietary changes, etc.

• Identify conditions under which referral to a nephrologist is indicated, considering unexpected abnormal changes in BUN, creatinine, creatinine clearance, and possible acid/base disturbances (i.e., metabolic acidosis).

• Recognize historical and physical exam findings consistent with the following components of the uremic syndrome: cardiovascular, HTN, pericarditis, bone disease, renal osteodystrophy 20 to phosphate unbalance, hematologic, anemia, hyperlipidemia, gastrointestinal, nausea, vomiting, GI bleed, dermatologic manifestations, pruritus, nervous system effects, and neuropathies.

• Utilize history to identify risk factors associated with bladder and renal Ca.

• Recognize physical exam and lab findings associated with bladder and renal Ca.

• Utilize historical data to identify potential risks for nephrolithiasis.

• Identify physical exam (e.g., flank pain, pain unrelieved by change in body position) and laboratory findings (e.g., hematuria) which are consistent with Nephrolithiasis.

• Identify the role of kidney biopsy in the diagnosis of acute vs. chronic and treatable vs. symptomatic disease.

• Identify important considerations in the management of a patient with glomerular disease, including control of risks (e.g., HTN, dietary protein), monitoring of kidney function (e.g., fluid output vs. intake, labs) and when to consider initiation of dialysis.

• Describe the natural host defenses against urinary tract infections.

• Group the known mechanisms by which UTI’s most frequently occur and recognize the patients’ at
highest risk.

- Explain and integrate the appropriate use of urinalysis and colony counts, culture and sensitivities in radiology in evaluating the female and male patient.
- Group the microorganisms that most frequently cause UTI's.
- Utilize historical and physical exam clues which distinguish vaginitis from UTI.
- Choose appropriate treatment and follow up for a male with a UTI with no immediately apparent etiology.
- Revise and select the common causes and treatments of dehydration and water excess.

Men’s and Women’s health (Urology, sex, and OBGYN) Modules:

**Sexual Function**

- Describe and discuss human sexual issues through the lifespan.
- Describe and relate the continuum of normal sexual development in males and females.
- Describe normal sexual function including the sexual response cycle, distinguishing gender differences, and the changes that take place through the lifespan.
- Define and explain the following concepts: human sexuality, sexual identity, gender identity, gender role, sexual orientation, and paraphilia.
- Describe and explain disorders of sexual differentiation, including the diagnosis and treatment, as well as the impact of the disorder on gender identity, gender role, and sexual orientation, including: Turner syndrome, Klinefelter syndrome, Androgen insensitivity syndrome, and congenital adrenal hyperplasia.
- Identify and explain the pathophysiology, diagnosis, and treatment options for the following disorders of sexual function: inhibited sexual desire, arousal phase disorders, and orgasmic phase disorders, dyspareunia, vaginismus, Priapism, Phimosis, paraphimosis, hypospadias, and epispadias.
- Describe and explain the following paraphilias: pedophilia, Frotteurism, sadism, masochism, exhibitionism, voyeurism, Transvestic fetishism, and fetishism.
- Formulate and demonstrate methods for facilitation of open, factual discussions of sexual issues with patients.
- Demonstrate the ability to take a thorough sexual history.
- Demonstrate and explain physical examination techniques, procedures, and findings relevant to the STDs, and disorders of sexual function.
- Identify and explain the diagnosis, treatment, and sequel of the following sexually transmitted diseases: herpes types I and II, human papilloma virus, gonorrhea, chlamydia, syphilis, lymphogranuloma venereum, molluscum contagiosum, bacterial vaginosis, chancroid, granuloma inguinal, HSV, HAV, HBV, CMV, HPV, Trichomonas, E. histolytica, Giardia, albicans, pubic lice, scabies, and HIV.
- Describe and explain the use and contraindications of common pharmacotherapeutic agents used in the treatment of sexual disorders, and list common medications that can affect sexual function.
- Define erectile dysfunction and sexual dysfunction of males and describe the appropriate evaluation and treatment.
- Explain how illness affects sexual function.
- Discuss case studies regarding sexuality.

**Urology**

- Explain the presentation, risk factors, evaluation, and management of each of the following: urinary tract infection (UTI), incontinence, interstitial cystitis.
- Describe and interpret laboratory tests to include: UA, PSA, urethral swab for STD, tests for testicular cancer including follow-up tests – FSH, LH, HCG, and semen analysis.
Identify and describe the signs, symptoms, evaluation and treatment of each of the following: UTI/cystitis, prostatitis, incontinence, BPH, urinary outlet obstruction, epididymitis, orchitis, testicular torsion, penile disorders, Peyronie’s disease, hernia, and hydrocele.

Define and describe genital trauma and the proper evaluation and treatment.

Describe the following genito-urinary tumors and describe the evaluation and treatment options: prostate cancer, penile cancer, testicular tumors, and bladder tumors.

Discuss case studies of the male genito-urinary tract disorders.

Consider age-related differences in risk for prostatitis and BPH.

Distinguish the differences in history, physical exam, and lab findings to ascertain the presence of prostatitis or BPH.

Identify differences in urinary WBC concentration with initial specimen, mid- and end-stream catches in a case of prostatitis.

Specify the historical and physical exam findings related to overflow incontinence secondary to BPH.

Distinguish between physical exam (i.e., hypertrophy vs. nodularity) and laboratory findings with BPH and prostatic Ca.

Discuss/choose the management of prostatic disease.

Discuss the epidemiologic data, pathophysiology, risk factors, screening tests, etiology, clinical manifestations, diagnosis, staging/grading, treatment, complications, and prognosis of genitourinary malignancies.

Discuss and describe the following with respect to their etiologies, epidemiology, clinical presentation, diagnostic test findings, treatments and prognosis: male infertility, benign prostatic hyperplasia, primary tumors of the testis, prostatitis, prostatodynia, acute epididymitis, testicular torsion, hydrocele, varicocele, male and hypogonadism.

**GYN**

- Explain the presentation, risk factors, evaluation, and management of each of the following: pelvic pain, amenorrhea, oligomenorrhea, menorrhagia, metrorrhagia, dysmenorrhea, dysfunctional uterine bleeding (DUB), premenstrual syndrome, and premenstrual dysphoric disorder (PMDD), benign breast diseases, breast cancer, menopause, pelvic support problems, and perimenopausal osteoporosis.
- Describe the following procedures and interpret results pertaining to women’s health: CBC, urinalysis, dipstick, wet prep/KOH, pregnancy tests, and hormonal assays: LH, FSH, Prolactin, testosterone, thyroid function test, basal body temperature charting and interpretation, and artificial insemination.
- Distinguish and interpret diagnostic procedures including appropriate referral for each of the following: pelvic ultrasound, CT and MRI, hysterosalpingogram, mammogram, Pap smear, Culdocentesis, and Biopsies (vulvar, breast, cervical, and endometrial).
- Explain the presentation, evaluation, and management of diseases of the female external genital tract and vagina, to include: sexually transmitted diseases, vaginal candidiasis, bacterial vaginosis, trichomoniasis, dermatologic problems of the vulva, malignancy, and Bartholin’s cysts and abscess.
- Explain the presentation, evaluation, and management of the following disorders of the uterus, fallopian tubes, and ovaries: endometriosis/adenomyosis, endometritis, leiomyoma/fibroids, pelvic inflammatory disease (PID), ovarian torsion, ovarian cysts, and polycystic ovarian syndrome (PCOS).
- Describe presentation, evaluation methods and initial management of gynecologic cancers.
- Recognize risk factors for sexual abuse, rape and domestic violence and describe evaluation, patient education and legal issues involved.
- Evaluate and present case studies of patients that have women’s health issues, demonstrating an
understanding of pertinent history, physical examination findings, pertinent diagnostic studies, and appropriate treatment plans.

• Understand and describe the normal mechanisms of the female menstrual cycle, and its relationship to family planning, contraception, fertility, fertilization, PMS, the climaacteric, menopause and aging.

• Analyze and summarize the abnormalities of the menstrual cycle as it relates to dysmenorrhea, amenorrhea, and abnormal bleeding.

• Describe and summarize the etiology, pathophysiology, clinical presentation, work-up, and management of common gynecological problems, including those that are infectious, benign, and/or malignant.

Obstetrics

• Explain healthy female fertility and explain the presentation, risk factors, evaluation, and management of infertility.

• Recognize patients at risk for unintended pregnancy and explain family planning options.

• Differentiate contraceptive methods in regard to side effects, efficacy, compliance issues, indications and contraindications and appropriateness for any given patient.

• Describe and discuss the normal physiologic mechanisms of pregnancy, the pre-natal period, labor and delivery, and the puerperium.

• Recognize and summarize the complications of pregnancy, and to be able to discuss their etiology, clinical presentation, and management.

• Describe the anatomy and physiology unique to pregnant women and the neonate.

• Describe diagnosis of pregnancy and appropriate care and evaluation of the pregnant patient, including pre-conception, prenatal, and postpartum stages.

• Select and interpret the following laboratory tests and imaging appropriate to the evaluation of a pregnant patient, especially as pertinent to pregnancy trimester: serum labs, genetic testing, vaginal cultures, Pap test, colposcopy, urinalysis, ultrasound, AFI, biophysical profile and amniocentesis, stress testing, and fetal monitoring.

• Assess risks in pregnant patients with the following maternal-fetal diseases, potential effects and appropriate treatment and management: diabetes, anemia, asthma, hypertension, Group B Streptococcus, HIV, toxoplasmosis, rubella, cytomegalovirus, varicella, herpes simplex virus, and Hepatitis.

• Describe the diagnosis, evaluation and management for the following complications of early pregnancy: ectopic pregnancy, molar pregnancy, and spontaneous abortion.

• Describe normal labor and management strategies, to include vaginal deliveries, cesarean sections (C-section) and vaginal birth after cesarean (VBAC).

• Identify indications and contraindications for induction of labor.

• Recognize the following complications in labor and delivery and describe basic management: dystocia, fetal distress, and post-partum hemorrhage.

• Recognize the presentation, describe the risks and explain the evaluation and management of the following complications in pregnancy, labor, and the puerperium: abruption placenta & placenta accrete, gestational diabetes, intrauterine growth restriction (IUGR), multiple gestation, placenta previa & vasa previa, eclampsia, pre-eclampsia & HELLP syndrome, premature rupture of membranes, preterm labor; and Rh incompatibility.

• Provide appropriate patient education regarding nutrition, exercise and medication use in pregnancy.

• Describe appropriate post-partum care and follow-up recommendations.

• Provide appropriate patient education related to breastfeeding.

• Evaluate and present case studies of patients that have obstetric and neonatal conditions, demonstrating an understanding of pertinent history, physical examination findings, pertinent
diagnostic studies, and appropriate treatment plans.

- Describe and discuss neonatal evaluation and care following delivery.

**Pediatrics Module:**

- Demonstrate the proper use and interpretation of growth charts.
- Identify familial, genetic and systemic disorders that can cause growth abnormalities in children.
- Describe the nutritional needs of infants through adolescents.
- Discuss and contrast theories of development.
- Using developmental milestones, determine whether or not a child is achieving normal neurodevelopmental maturation.
- Review and discuss the immunization schedule in the pediatric population.
- Describe the performance of an examination on an infant and child.
- Produce an appropriate schedule for routine well baby care, to include frequency of visits and historical physical and laboratory data to be evaluated.
- Describe common causes and risks of childhood morbidity and mortality.
- Describe adolescent health care issues including: morbidity and mortality, use of health care, confidentiality and consent, barriers to health care, determining sexual development, psychosocial development, cognitive development, interpersonal and social development, and psychological development.
- Describe the questions asked during an adolescent psychosocial screening.
- Identify the common dermatoses seen in childhood and adolescence.
- Describe common childhood concerns, such as temper tantrums, thumb sucking, and enuresis, and address strategies to deal with them.
- Identify the common orthopedic problems in the pediatric population.
- Describe the specific components of a complete pediatric history and physical exam to include major headings as well as specific data in each of the major areas.
- Recognize and differentiate the more common normal variants and abnormal physical findings seen on routine neonatal examination.
- Recognize, describe, and summarize normal growth and development in terms of major developmental achievements. Recognize the more common milestones and their age of occurrence.
- Recognize, define, and discuss the etiology, dermatologic and general clinical manifestations, laboratory findings, and treatment of the common viral and bacterial infections.
- Recognize, define and discuss the etiology, dermatologic and general clinical manifestations, laboratory findings, and treatment of upper and lower respiratory infections.
- Recognize, define and discuss the etiology, and general clinical manifestations, laboratory findings, and treatment of common pediatric orthopedic abnormalities.
- Recognize, define and discuss the etiology, and general clinical manifestations, laboratory findings, and treatment of common pediatric neurological abnormalities.
- Define "Attention Deficit Disorder" and "Specific Learning Disabilities" and list the behavioral characteristics of each.
- Organize an appropriate workup of a child with suspected learning disabilities and discuss the general principles of diagnosis.
- Compare and contrast specific learning disabilities, mental retardation, psychosis, and behavioral disorders in terms of H&P findings, IQ, neurological deficits, and parental observations.
- Discuss the various types of child abuse that are commonly seen today and recognize the typical historical findings associated with child abuse.
- Recognize and summarize the typical physical findings seen in physically and sexually abused
children.

- Discuss the general principles of accident prevention that should be explained to parents as part of routine pediatric patient education.

**Rheumatology Module:**
- Define and discuss the laboratory tests used for the diagnosis of rheumatologic disease and describe when they are ordered, and interpret results, including: CRP, sedimentation rate, rheumatoid factor, Anti CCP, Antinuclear antibody, Antineutrophil Cytoplasmic antibodies (ANCA), Anti-centromere antibody, Anti-SCI 70, Anti SS-A (ro), Anti SS-B (la), and Joint fluid analysis for septic joint, gout/pseudo gout, and arthritis.
- Describe and discuss the clinical findings, differential diagnosis, and treatment of the following pain syndromes: reflex sympathetic dystrophy, fibromyalgia, neck pain, thoracic outlet syndrome, lumbar back pain, sciatica, and lumbar spinal stenosis.
- Identify the collagen vascular diseases and discuss their signs, symptoms and evaluation. Describe also, the treatments for each of the diseases: lupus, vasculitis, temporal arteritis, scleroderma, and polymyalgia rheumatica.
- Describe and discuss the pathophysiology, clinical findings, differential diagnosis, and treatment of the following diseases: osteoarthritis, Paget’s disease of bone, rheumatoid arthritis, Sjögren’s, Reiter’s, Psoriatic arthritis, Ankylosing spondylitis, gout, and pseudo gout.
- Identify the signs, symptoms, risk factors, and treatment options for: osteoporosis, septic joints, avascular necrosis, bursitis, and tendonitis.
- Describe and discuss the clinical findings, differential diagnosis, and treatment of benign and malignant bone tumors.
- Evaluate and present case studies of patients that have rheumatologic diseases, demonstrating an understanding of pertinent history, physical examination findings, pertinent diagnostic studies, and appropriate treatment plans.

**Orthopedics Module:**
- Describe and recognize the evaluation and treatment for and distinguish, based on history and physical exam each of the following: plantar fasciitis, fractures, dislocations, sprains, strains, tendonitis of different joints, patellofemoral syndrome, bursitis of varied joints, Osgood-Schlatter disease, various ligament injuries, meniscal injury, slipped capital femoral epiphysis, trochanteric bursitis, avascular necrosis of the hip, low back pain, scoliosis, lordosis, torticollis, spondylolisthesis, herniated nucleus pulposis, cauda equina syndrome, spinal stenosis, spinal compression fractures, rotator cuff injury, impingement syndromes, acromioclavicular separation, nursemaid’s elbow, epicondylitis, carpal tunnel syndrome, ganglion cyst, Dupuytren’s syndrome, deQuervain’s disease, trigger finger, mallet finger, gamekeeper’s thumb, subungual hematoma, and infectious musculoskeletal disorders (septic joint, osteomyelitis, paronychia, felon, tenosynovitis).
- Apply the Salter-Harris fracture classification system for each of the fractures listed above and demonstrate the proper terminology appropriate for a referral, including angulation, rotation, and neurovascular assessment.
- Develop familiarity with the following techniques, common surgical procedures to include anatomic landmarks and common post-operative care and complications:
  - Closed reductions
  - Open reductions
  - Joint replacements
• Carpal tunnel release
• Back surgery procedures
• Bracing
• Arthroscopic procedures

• Describe appropriate indications for referral (i.e. emergent vs. urgent vs. non-urgent) of the orthopedic injuries/pathologies in the above objectives.
• Demonstrate the ability to evaluate and interpret diagnostic images and related studies of the extremities related to the above list of disorders.
• Describe appropriate pain management strategies in the orthopedic patient.
• Evaluate and present case studies of patient’s orthopedic conditions, demonstrating an understanding of pertinent history, physical examination findings, pertinent diagnostic studies, and appropriate treatment plan.
• Provide patient education with regards to avoidance of common overuse syndromes found in recreational and workplace settings, return to play criteria with regards to sports medicine injuries and appropriate use of therapies and restrictions.

ASSESSMENT AND GRADING

• End of module exams 60%
• Clinical Correlation Cooperative Group Assignments 30%
• Full attendance and participation with professional behavior 10%

Your grade will be determined by calculating the percentage of points you have earned out of all available points, and comparing your percentage to the standard grading scale (A= >90.00%, B=80.00-89.99%, etc.) with appropriate adjustments made for + and - grades.