KNES 441/443/445 – PRACTICUM COURSE

Practicum Position Title: Exercise Physiology (Applied) Assistant

# of Positions Available: One per term

Industry/Company Description: Calgary Fire Department, Wellness Clinic
The Calgary Fire Department Wellness Clinic specializes in occupational medicine and incorporates a multidisciplinary team approach to proactive screening and physiological testing. The clinic employs physicians, nurses and exercise physiologists that work together to conduct a medical assessment and exercise physiology testing.

Location: 4144 11th St SE

Required Hours: 60-72 hours per term – evenly dispersed throughout term: 6 hours per week during fall or winter terms

Academic Session: Fall or Winter Terms

Specified Schedule: The normal clinic hours are from 7:00 am to 4:00 pm, Tuesday to Friday with occasional recruit CPAT testing on additional days.

Note: Students must be available to begin their placement at 7:00 a.m. and complete a minimum of 6 hours within one day on either Tuesday, Wednesday, Thursday or Friday.

Duties/Responsibilities:

Under supervision of exercise physiologist, the student will:
1. Assemble and prepare the testing equipment.
   - Learn to assemble masks, accessory equipment, room set up
   - Calibrate gas and flowmeter systems
   - Learn troubleshooting techniques for common set up issues
2. Report to the exercise physiologists daily to assist in routine testing, data entry and exercise counselling.
   - Conduct VO₂ max testing. The student will learn how to:
     - Assess maximal and submaximal aerobic fitness levels,
     - Explain and outfit participant properly for the test,
     - Aid in test implementation and computer control,
     - Interpret the data
     - Identify anaerobic threshold
   - Bioelectrical Body Composition Analysis and Anthropometry. The student will learn how to
     - Operate and interpret results from the Inbody machine,
     - Landmark for waist and hip circumference measurements
   - Conduct various forms of musculoskeletal testing. The student will learn how to measure:
     - Strength,
     - Endurance,
     - Power and flexibility measurements
   - Collect data related to a number of exercise testing protocols used with firefighters such as cardiovascular physiology, musculoskeletal physiology and training methods.
     - Explain results, provide guidance and motivate participants to exercise in relation to occupational health
   - From 5 datasets and client descriptions that represent common themes for CFD members, students will:
     - Select one dataset to analyze.
     - Design an exercise program based on the results of the analysis and client description
     - Summarize the reasoning behind the chosen exercises, format, volume, repetition ranges, etc., in a two-page summary (bullet point format)
     - Submit summary to designated on-site supervisor/s by the end of the term

Student Qualifications:
Required:
1. KNES 373 Exercise Physiology – Mandatory

Assets:
2. KNES 375 Tests and Measurement in Kinesiology
3. KNES 479 Advanced Fitness Appraisal & Exercise Prescription
4. CPR and First Aid.
5. Certified Personal Trainer (CPT)

On-Site Supervisor: Carrie Anderson – carrie.anderson@calgary.ca or ckanderso@gmail.com