

**MSAT Pre-requisite Course Worksheet**

Prospective Students: Use this worksheet to compare courses from outside of Cal State Fullerton to our specific pre-requisite courses.

**If you have already completed the course(s) and want to know if it will satisfy our requirement:**

* Paste in the course description from the course you took and compare it to the course description from our CSUF course.
  + If the course descriptions are very similar, then the course will satisfy the pre-requisite.
  + If the course descriptions are not similar, then you will need to take an appropriate course (see instructions below).
  + If you can’t tell, email your worksheet to Dr. Montgomery at [msat@fullerton.edu](mailto:msat@fullerton.edu) and indicate which course(s) you are wondering about.

**If you are trying to figure out which course(s) you need to take at your school to count for our pre-requisites:**

* Go to the catalog of the school where you intend to take the course and look at the course descriptions in the appropriate department to find the course that is most similar to ours.
* Paste in the course description for the course that you think will satisfy the requirement.
  + If there is more than 1 course that you think is similar, paste in all of the course names and descriptions.
  + If the course descriptions are very similar, then the course will satisfy the pre-requisite.
  + If there are no course descriptions that are similar to ours, then you will need to find a course at another school.
  + If you’re not sure, paste in the course descriptions for all courses at your school (e.g. BIOL 101, BIOL 201, BIOL 301) that you think might work.
    - Email your worksheet to Dr. Montgomery at [msat@fullerton.edu](mailto:msat@fullerton.edu) and indicate which course(s) you are wondering about.



**MSAT Pre-requisite Course Worksheet**

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| **BIOL 151: Cellular and Molecular Biology (4 units)**  Lecture and laboratory exploration of eukaryotic/prokaryotic cellular structure and function, biological molecules, classical/Mendelian genetics, regulation of gene expression and biotechnology, cell signaling, metabolic pathways, the process and regulation of cellular reproduction, evolution of multicellularity. (For majors in CNSM). (3 hours lecture, 3 hours laboratory) |
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| **KNES/BIOL 191A: Integrated Human Anatomy & Physiology A (4 units)**  Integrated introduction to human anatomy and physiology. Structure and function of the musculoskeletal, nervous and cardiorespiratory systems. For nursing majors and students interested in allied health professions; no credit toward Biological Science major. (3 hours lecture, 3 hours laboratory) (KNES 191A and BIOL 191A are the same course).  **-OR-**  **BIOL 361: Human Anatomy**  Systems approach to the structure and function of the human body. For biological science majors and related health sciences. (2 hours lecture, 6 hours laboratory) |
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| **KNES/BIOL 191B: Integrated Human Anatomy & Physiology B (4 units)**  Second semester of integrated concepts in human anatomy and physiology for nursing, allied health and kinesiology majors. Nutrition, water and ion balance, and homeostatic regulation by the digestive, renal, cardio-respiratory, endocrine, nervous systems. No credit toward biological science major. (3 hours lecture, 3 hours laboratory) (BIOL 191B and KNES 191B are the same course.)  **-OR-**  **BIOL 310: Human Physiology (3 units)**  Human physiological systems and their relationship to human function for non-biology majors and students in kinesiology and health sciences. No credit for biological science major. |
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| **CHEM 120A (preferred): General Chemistry (5 units)**  For majors and minors in the physical and biological sciences. The principles of chemistry: stoichiometry, acids, bases, redox reactions, gas laws, solid and liquid states, changes of state, modern atomic concepts, periodicity and chemical bonding. Laboratory: elementary syntheses, spectroscopy and volumetric quantitative analysis. (3 hours lecture, 3 hours laboratory, 2 hours activity)  **-OR-**  **CHEM 115: Introductory General Chemistry (4 units)**  Chemistry at the basic level. For students with limited background in chemistry who plan to take additional chemistry or other science courses. Does not fulfill chemistry requirements for majors or minors in the physical or biological sciences. (3 hours lecture, 2 hours activity) |
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| **PHYS 211/L (preferred): Elementary Physics (3 units)**  Introduction to mechanics and thermodynamics. Designed for life and health science majors.  **-OR-**  **PHYS 101: Survey of Physics (3 units)**  Basic concepts of physics for the non-science major. Physical concepts in real-world contexts such as global warming. How our ideas about motion, energy, heat and temperature, light and color, electricity, and atoms form a framework for understanding the natural world. |
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| **PSYC 101: Introductory Psychology (3 units)**  Concepts, issues, and methods of psychology. Processes of sensation/perception, motivation/emotion, learning/memory, cognition. Research in developmental, personality, social, abnormal, and biological psychology. Research participation required. It is recommended that students satisfy the ELM requirement before enrolling.  **-OR-**  **KNES 383: Psychology of Sport and Physical Activity (3 units)**  Introduction to theory and research of psychological processes that influence human performance in numerous movement settings including sport, exercise, and rehabilitation. Individual difference variables, social psychological variables and assessment and intervention. |
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| **KNES 470: Nutrition for Exercise and Performance (3 units)**  Role of different nutrients (macro and micro) to provide energy during exercise, enhance performance and support recovery after exercise. Fluid replenishment, nutritional supplements, nutritional immunology and the female athlete.  **-OR-**  **PUBH 350: Nutrition (3 units)**  Concepts of nutrition as they relate to nutritional needs, practices and problems throughout the life cycle. Nutritional counseling and education of individuals/groups toward health promotion and disease prevention. |
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| **PUBH/KNES 349: Measurement and Statistics in Kinesiology (preferred) (3 units)**  Measurement theory and statistics used in evaluating health and human performance, focusing on analyzing and interpreting data in different environments.  **-OR-**  **MATH 120: Elementary Statistics (3 units)**  Explore and analyze data with real-world applications. Design surveys and experiments. Graphical and numerical summaries. Correlation, regression and analysis of contingency tables. Confidence intervals and hypothesis testing via simulation and using normal, t, chi-squared distributions. |
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| **KNES 205: Medical Terminology (3 units)**  Introduction to medical terminology using word building (roots, suffixes, prefixes, spelling, and pronunciation) as they relate to anatomical structure and function. Additional topics include medical terminology related to pharmacology, abnormal conditions, surgical procedures, and diagnosis and treatment of medical conditions. (KNES 205 and NURS 205 are the same course.) |
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| **KNES 348/L: Physiology of Exercise (3 units) and Lab (1 unit) (preferred, but not required)**  Description and explanation of functional and structural changes in the body brought on by acute exercise and chronic training. |
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| KNES 365: Pathologies in Sport/Exercise (3 units) Common pathologies seen in sport and/or exercise, including prevention strategies, etiologies, diagnoses, management approaches and possible complications. |
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