Sci 1A (50201) – Introduction to Chemistry and Physics

Fall 2018 M 4-7:00 W 4-7:00 Phy 70

<u>Instructor</u> – Kuldeep K. Maan

email –

<u>Textbook</u> – "Conceptual Physical Science", Hewitt, Suchocki, Hewitt, 6th edition, Pearson Addison Wesley

<u>Course Objective</u>: The primary objective of this course is to eliminate the fear and dread of physics and chemistry. The secondary objective is to familiarize the student with an elementary understanding of how science works. Finally, we will apply the principles about science to understanding some basic principles of chemistry and physics. This course will cover various portions of the book. Topics in physics and chemistry will be covered. The physics topics that will be covered are matter and energy, motion, electricity and magnetism, light and color. Chemistry topics will include atoms and molecules, the periodic table, physical and chemical properties and changes, chemical bonding and reactions. These topics will be covered with the goal of enabling the student to teach these topics to K-6 students.

Attendance: The class is "demonstration oriented". All the concepts will be demonstrated with concrete activities. If you miss class, for any reason, you will miss most of what you will get out of that class. Therefore, attendance is worth 25% of the grade. Perfect attendance = 100%, every absence drops the attendance grade by 10%, so 10 absences means a 0 on the attendance grade.

Homework: Homework will be assigned each week and will be worth 25% of the grade. Roughly half of the homework will be graded, the other will be checked for completeness

Projects: There will be two projects, each involving an individual presentation to the class. The project involves presenting a 10-15 minute science lesson appropriate to the grade you hope to teach. There will be a project in the physics portion and the chemistry portion of the class. The project will be worth 25% of the grade.

Exams: There will be a final exam in the physics and the chemistry portions of the class. There may be smaller quizzes as well. Tests will be worth 25% of the grade.

The first nine weeks of the course will cover topics in physics, the second nine weeks will cover topics in chemistry. You will receive a grade for each section, which will be averaged for your final grade.

 $\begin{array}{ccc} \underline{\textbf{Grading Policy}} \colon & 90-100\% & A \\ & 80-90\% & B \\ & 70-80\% & C \end{array}$

 $\begin{array}{ccc} 60-70\% & D \\ 0-60\% & F \end{array}$

Special Needs Requests: If you have special needs as addressed by the Americans with Disabilities Act (ADA) including alternate media requests, please notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs.