**Biochemistry COVID Activities: Activity Description**

Mind/Concept Map (10 points) – Use the list of COVID related terms to show relationships and grouping. Performed Individually

Virus Structure and Function Activities – a list of questions related to the structure and function of viral proteins

* Video Presentation (25 points) Group assignment video on assigned question
* Comment (10 points) Each individual critique/suggestions to two other videos
* Group Questions (20 points) Each group will answer two additional questions and submit in writing.

COVID Therapeutics (20 points) Four questions to be answered as a group on drug mechanism and evidence for each drug.

Research Publication – ACE-Spike Protein (30 points) An in depth analysis of S protein binding to the ACE receptor. Individually answered questions. Support activity includes two videos and the publication.

Research Papers – Mutational Analysis (30 points) Students will apply their understanding of the structure function of protein and the biochemical/molecular biology of SARS2 and investigate the implications of mutations in the polybasic region or the point mutation in the spike protein that have occurred before and during the pandemic. Students will be placed in groups for each of these questions and engage using a discussion board. Points are assigned for comments as well as answering questions. Both individual and group work.