Name:

**Assignment 4 GEOG 212**

*This assignment is worth 25 points and will be evaluated based on completeness, accuracy, and comprehensiveness, using the criteria, instructions, and the allocated points listed for each task in this document. Resources that may help you in completing this assignment include the course textbook, the modules and PowerPoints, and some on-line research (depending on the questions/tasks being asked of you).*

*Review this video on*[*How to Submit an Assignment in Blackboard*](https://bbaddins.schoolcraft.edu/addins/dl/help-videos/Assignment_Help_Video.html)*if you need assistance with this feature. See Calendar for due date. Please save your assignment as a Word document (don’t alter the format of this Word document) and type your name or initials at the end of the file name. Once completed and saved to a certain folder on your computer, go into the Assignment folder on Blackboard and upload your assignment accordingly.*

**Part 4.1: Human Population**

1. Click on (or find) the [Population & Demography Data Explorer](https://ourworldindata.org/explorers/population-and-demography) (<https://ourworldindata.org/explorers/population-and-demography>) and determine the top 5 most populous nations and their populations in 1950 and 2021. You will use an interactive graph on this website that will help you answer these questions. **[10 points]**

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| Nation  *(rank, using 2021 values, top 5 from highest to lowest)* | Population in 1950 | Population in 2021 | Difference in Population from 1950 to 2021  *( + or - )* |
| #1 | China | China | +886,020,000 |
| #2 | India | India | +1,052,980,000 |
| #3 | United States | United States | +188,720,000 |
| #4 | Japan | Indonesia | Japan: +40,260,000 |
| #5 | Indonesia | Pakistan | Indonesia: +204,180,000  Pakistan:  +193,700,000 |

1. Click on (or find) the[Population & Demography Data Explorer](https://ourworldindata.org/explorers/population-and-demography)and change the metric to "Annual Population Change". The resulting graph will show the change in a country's population each year. You will note that China seems to have a dramatic decrease in population during the early part of the 1960s. By how much did the population drop after the 1958 peak? What caused this decrease in population? **[5 points]**

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| After 1958, China was experiencing nearly 14 million people per year. However, that dropped down to a low of 1 million in 1961. The cause of this was famine that was formed from various factors. The biggest catalyst being the “Great Leap Forward” a campaign led by Mao Zedong, was meant to transform China from an agrarian society into a socialist society through rapid industrialization. This process was so rapid, that it led to famine due to the rapid collapse of agriculture. |

1. Click on (or find) the[Population & Demography Data Explorer](https://ourworldindata.org/explorers/population-and-demography)and change the metric to "Population" if it's not already there. Play around with the Projection Scenario and change it between Low, Medium, and High up to the year 2100. Describe what may happen to the population of the world for each of the three projections by the year 2100. **[6 points]**

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| **Projection Scenario** | **Trends/Changes to Populations  (global and national levels)** |
| **High** | **If fertility rates remain high, the global population could surge to well above 11 billion by 2100. Developing nations would likely account for much of the growth. This would exaserbate already existing problems like resource scarcity, climate change, and economic inequality.** |
| **Medium** | **With a moderate rate of fertility, we could expect the population globally to be somewhere around 9-10 billion. This increase is large, but more manageable, and allows for better planning and resource allocation.** |
| **Low** | **If fertility rates were low, the global population would most likely plateau and eventually decrease. This would ease environmental strain but would also represent a majority of an aging population and reduced labor force.** |

1. What country has the most change in its annual population since 1951? **[1 point]**

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| India has seen the largest population change since 1951 in both rate and numbers. |

1. Change the parameters to infant mortality rate and choose three countries to display the date for: China, India, and the USA. List the infant mortality for each of these nations for 1951 and 2021. **[3 points]**

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| --- | --- | --- | --- |
| Country | Infant Mortality Rate 1951 | Infant Mortality Rate 2021 | Comments |
| China | 12.85% | 0.57% | Significant decrease due to economic growth, better healthcare, and improved living conditions. |
| India | 18.01% | 2.55% | Marked improvement but still higher compared to developed nations. |
| USA | 3.14% | 0.54% | Consistently low and declining, reflecting high standard of healthcare. |