**WEAX 201**

**Module 1 Discussion Topics**

Choose ONE of the topics below. ***In 500 words or less,*** develop *a structured and engaging* initial post that covers all discussion points as outlined for that topic.

1. **Construct an engaging 3-paragraph initial post that ties ONE, or a combination of, of the following *weather elements* to aviation operations: temperature, humidity, wind, clouds, precipitation, or visibility.**  The paragraphs should address the following points:

* **Paragraph 1:** Outline a general definition and description of the weather element(s), referencing this week’s readings on the seven weather elements and atmospheric structure, as appropriate.  Include descriptive features about the weather element(s) - its variation in time and/or space, relevant terminology, conventions, common units of measure, etc.
* **Paragraph 2:** Summarize one or more impacts of the weather element(s) to aviation operations.
* **Paragraph 3:** You have two options for this paragraph:

1. Provide a *real* example, from an article or documented report (aircraft incidents or accidents, for example), of the aviation impact of this weather element.
2. Give us “your take” on the relevance and importance of this topic from your own perspective, by providing personal points of view or related experiences.
3. **Construct an engaging** **3-paragraph initial post** **relating the vertical variation in atmospheric pressure and density to aviation operations.** The paragraphs should address the following points:

* **Paragraph 1:** Referencing this week’s readings, describe the vertical variation in Earth’s atmospheric pressure and density, and explain the physical reasons for this observed vertical structure (graphics will add greatly to the discussion here).
* **Paragraph 2:** Summarize one or more aspects of how the vertical variation in Earth’s atmospheric pressure and density applies to aviation.
* **Paragraph 3:** You have two options for this paragraph:

1. Provide a *real* example, from an article or documented report (aircraft incidents or accidents, for example), illustrating the effects outlined in paragraph 2.
2. Give us “your take” on the relevance and importance of this topic from your own perspective, by providing personal points of view or related experiences.
3. **Construct an engaging 3-paragraph initial post that clarifies the differences between *weather* and *climate*.** The paragraphs should address the following points:

* **Paragraph 1:** Referencing this week’s readings, state the definitions of weather and climate, and clarify the differences between them, and give one general example that clarifies the difference.
* **Paragraph 2:** For your current location, or any location that has meaning or interest to you, research a reputable internet weather source (potential resources are listed in the **Course Specific Instructions** section of the course) to:
  + Summarize the *climate* at the location (graphics will add greatly to the discussion here).
  + Provide a general description of the *current weather* for the location - high and low temperature, dew point temperature or relative humidity, and precipitation (if any).

Point out differences or alignment between the climate and current weather.

* **Paragraph 3:** You have two options for this paragraph:

1. Based on the *climate,* discuss one or more potential impacts to aviation at an airfield near your chosen location.
2. Give us “your take” on the relevance and importance of this topic from your own perspective, by providing personal points of view or related experiences.