[**Unit I Journal**](https://online.columbiasouthern.edu/webapps/assignment/uploadAssignment?content_id=_6104695_1&course_id=_99969_1&group_id=&mode=view)

* + **Weight:** 2% of course grade
  + [**Grading Rubric**](https://online.columbiasouthern.edu/webapps/blackboard/content/listContent.jsp?course_id=_99969_1&content_id=_6104679_1&mode=reset#grading-rubric)

**Instructions**

In our first unit lesson, we discuss the importance of considering human variability in the design process. When designing products such as airplanes, which are used by global populations, variations in overall body size and shape provide a challenge for designers. Please discuss an instance when you felt a product was not designed to fit your personal body type. Share this product and how it failed to meet your needs. What recommendations do you have for the designer?

Your journal entry must be at least 200 words. No references or citations are necessary.

[**Unit I Case Study**](https://online.columbiasouthern.edu/webapps/assignment/uploadAssignment?content_id=_6104696_1&course_id=_99969_1&group_id=&mode=view)

* **Weight:** 8% of course grade
* [**Grading Rubric**](https://online.columbiasouthern.edu/webapps/blackboard/content/listContent.jsp?course_id=_99969_1&content_id=_6104679_1&mode=reset#grading-rubric)

**Instructions**

Anthropometric Design Exercise

This assignment is designed to provide an opportunity to apply the concepts you have learned in the Unit I Lesson regarding the inclusion of ergonomics during the design process. Specifically, you will be using anthropometric data to develop design recommendations.

As a recent graduate of Columbia Southern University’s Safety and Emergency Services program, you have just been hired as a member of the Occupational Safety and Health (OSH) staff for Aston Martin Lagonda Automotive Manufacturing located in Gaydon, England. Your first work assignment requires you to work with members of the facilities improvement team to develop design recommendations for new office workstations.

Using the ergonomic design guidelines discussed in the unit lesson and the appropriate anthropometric data from Tables 3.2 and 3.4 in the course textbook, develop a proposal for the new workstations. Your proposal should be a minimum of two pages in length, not counting the title page and the references page, MUST include a copy of your computations/calculations, and may include graphics to illustrate your design. You are required to use a minimum of two outside sources; one may be the textbook. Your proposal should be written to your management and must include the following two parts:

Part 1:

* a brief introduction that identifies the nature of the work assignment;
* an overview of the importance of including ergonomics in the design process;
* an overview of how anthropometry can be used to address human variability.

Part 2:

Complete the following using the [**calculation template**](https://online.columbiasouthern.edu/bbcswebdav/xid-116623768_1):

* computations for the dimensions of the following:
  + desk (height only),
  + chair (must include a range of adjustability for the height, the dimensions for the seat pan, and the armrests), and
  + computations for any other office equipment that you would like to include in your design proposal (optional);
* justification for your design decisions by identifying the user population for which you are designing, why that population was selected, the body dimension(s) selected for each computation, and the percentage of the population for which you are designing and why that percentage was selected.

Click [**here**](https://online.columbiasouthern.edu/bbcswebdav/xid-113678961_1) to access a supplemental document containing information necessary to complete the assignment.

Your proposal should be a minimum of two pages in length, not counting the title page and the references page, MUST include a copy of your computations/calculations, and may include graphics to illustrate your design. You are required to use a minimum of two outside sources; one may be the textbook.

**Resources**

The following resource(s) may help you with this assignment.

* [**Citation Guide**](https://www.columbiasouthern.edu/downloads/pdf/success/citation-guide)
* [**CSU Online Library Research Guide**](http://libguides.columbiasouthern.edu/osh)
* [**Submit Writing Center Request**](https://mycsu.columbiasouthern.edu/student/forms/courses/writing-center-request)