

NAT161 Citizen Science Project (value: 20% of final grade)

This is an individual projects (not group project).

Citizen Science (20%)

Perform **three (3)** activities. You can do more if you desire but must complete and submit at least three (3).

Citizen Science Projects

These are projects where the general public helps in gathering and analyzing data used by scientists. You will get to participate in the analysis of surface features on Mars; you can analyze real astronomical data to help in the discoveries of exoplanets; you can help in analysis of very distant galaxies or identify meteors by radio. The reason scientists ask for input from the general public is that humans are (still) better than computers in cases of complex pattern recognition. A statistically large number of participants can provide meaningful and useful input in classifications of real astronomical data.

1. Go to the zooniverse website <https://www.zooniverse.org/>
2. **Create** your own unique User Account. **Your UserName must be a derivative of your real name (ie, SueJones25). Do Not use nicknames, they will not be accepted for assignment marking.**
3. Select the **"Space"** projects on the very far right side. You might have to click on the ">" to get to the "Space" projects. **Do NOT do "Science Gossip" or "Calgary Captured"**. For this assignment, all activities must come from the "SPACE" category.
<https://www.zooniverse.org/projects?discipline=astronomy&page=1>

Assignment requirements:

For EACH of the three (3) activities:

- Perform a **minimum of 10 identifications**, measurements or classifications for **each** activity. **Note**, the minimum (10 identifications) gets you minimum marks. **Doing 20 or more identifications** gets you **gets you full marks for this part of the assignment**.
- **Produce** a report in **PDF format** that **for each activity**:
 1. Describe the **goals** of each activity you participate in and explain their scientific significance.
 2. **Describe** the type of classifications or analysis you participated in and the type of tasks that you had to do (measurements, classifications, etc). **You must include** graphical examples.
 3. **Reflect** (minimum **150** words **for each** of the activities) personally on what you learned about the specific objects while doing the classifications – was there anything that you found surprising, unexpected? Or, was the data confirming your previous knowledge about the object(s)? What you liked, disliked, was easy, or found difficult about the classifications or analysis.
- **YOU MUST Insert a screen capture** of the summary of your "zooniverse" participation and your submission results that **confirm** the number of identifications performed for each activity. This **MUST** be inserted in your project or else it cannot be graded

Sample screenshot of a result is shown below. It **must include both your name with total classifications AND a breakdown for each of the projects you did.**

NOTE: The screen capture must be big enough to include the Date/Time/Year on your computer screen.

