

# ASTRO 1020 Lab

## L6: Galaxy Classification

# Grading

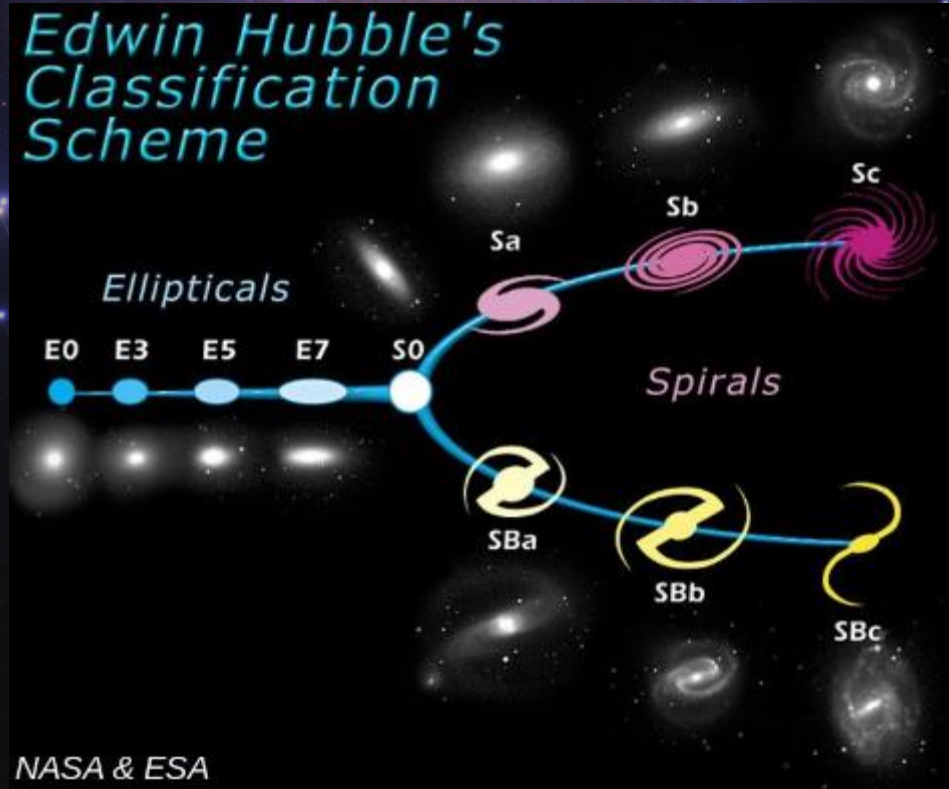
- All labs are scaled to be graded out of 10 points\*

Points per question	Description
1.0	A correct answer <b>with</b> units <b>and</b> work shown. Answers that don't require work will be <b>graded on completion</b>
0.8	A correct answer <b>without</b> units or work shown
0.6	An incorrect answer <b>with</b> units <b>and</b> work shown
0.4	An incorrect answer <b>without</b> units or work shown
0.2	Some work shown <b>without</b> an answer
0.0	Not Attempted

# Things you need to know for Lab 6

- Different types of galaxies
- Finding percentages
- The age of the Universe: 13.8 billion years

# Types of Galaxies



# Elliptical Galaxies



Credit: NASA/ESA/Hubble/J. Blakeslee (WSU)

Credit: EHT



Credit: NASA/STScI/Hubble

Credit: ESA/Hubble

# Spiral Galaxies



Credit: NASA/ESA/STScI/CFHT/NOAO

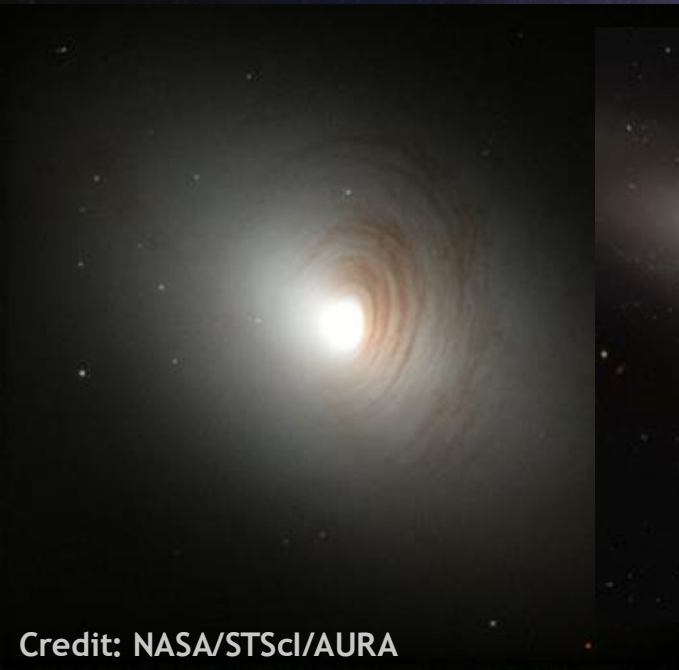


Credit: ESO/VLT



Credit: ESA/Hubble & NASA

# Lenticular Galaxies



Credit: ESA/NASA/Hubble

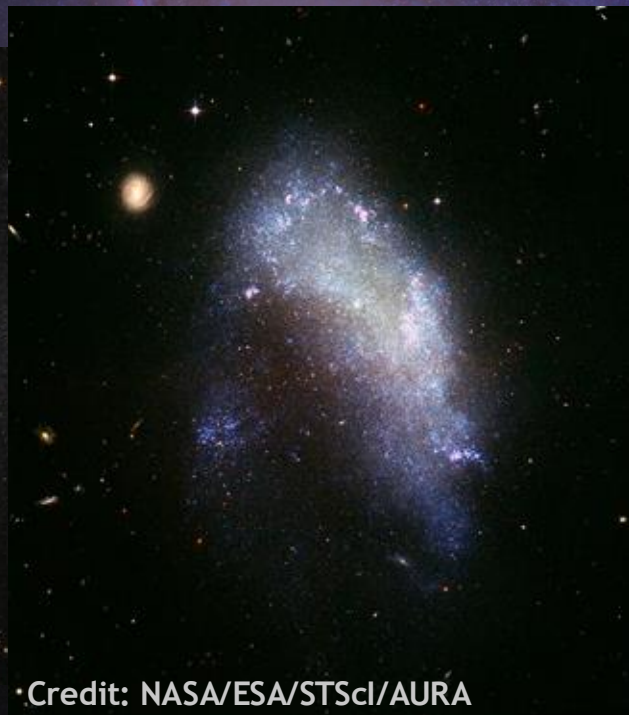
Credit: NASA/Hubble

Credit: NASA/STScI/AURA

# Irregular Galaxies



Credit: ESA/Hubble



Credit: NASA/ESA/STScI/AURA



Credit: ESA/Hubble

# Finding percentages

- What is 5% of 30?

$$\frac{5}{100} \cdot 30$$

$$= 1.5$$



NGC 4490



UGC 2885



UGC 5189A



NGC 3059



NGC 1132



NGC 4449



NGC 4621



M 83



M 89



NGC 2985



NGC 6861



NGC 3558 [L]  
LEDA 83465 [R]



NGC 6684



NGC 691



Questions?