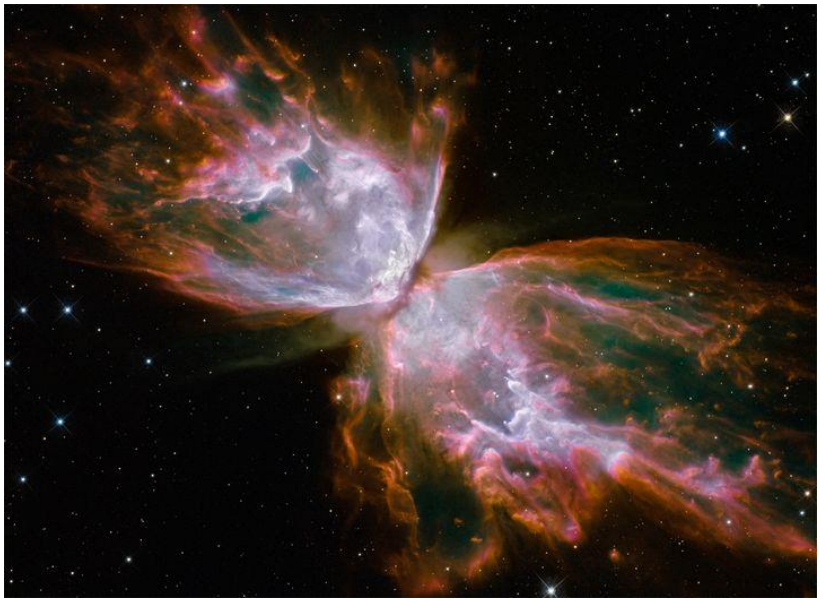
Astro 101.004

Professors: Neil McFadden & John McGraw



Astro 101 – Spring 2018

- Professors: Neil McFadden, nmcfadde@unm.edu

  John McGraw , mcgraw@unm.edu

- Class Web page: http://physics.unm.edu/Courses/McFadden/
- "Astronomy" by Andrew Fraknoi, David Morrison and Sidney Wolff. This book can be found for **free** in pdf form at https://openstax.org/details/books/astronomy
- Homework: Reading and in class quizzes
- Grading: 4 Tests

Instructions

- Syllabus: on-line & personal copy. Be sure to read it.
- Tests: bring two number 2 pencils. Multiple-Choice. No scantrons.
- Office-Hours: Physics and Astronomy room 128 by appt.
- Campus Observatory: Every Friday during the Fall and Spring Semesters (except Thanksgiving, and Fall and Spring Break) when the weather is clear; recorded information is also available at 277-1446. 7-9 p.m. MST, 8-10 p.m. MDT
- In Class: Ask questions, challenge unbelievable statements, be curious about the universe, and don't leave class feeling that you did not get a satisfying answer to your question.
- Read the assignments BEFORE class

Class Rules
Respect your class mates

- Do not talk during class – hard for other people to follow lecture
- Do not eat during class – food is not allowed in the planetarium
- Be polite with electronic devices. Keep phones away and laptops closed.
- Don’t put your feet up on the seats please.
- Don’t start packing until class is over.

Academic Integrity

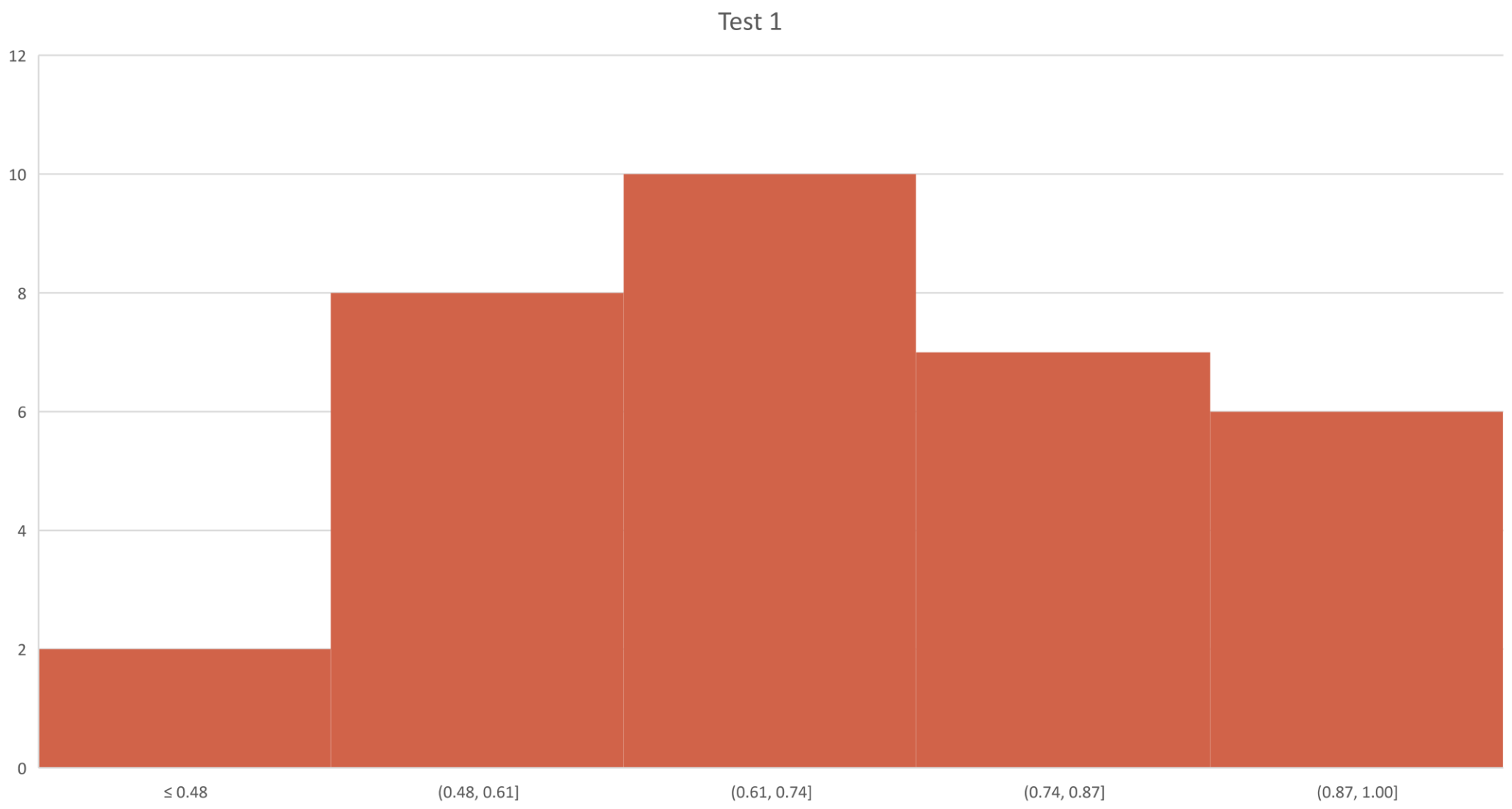
- “Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.”

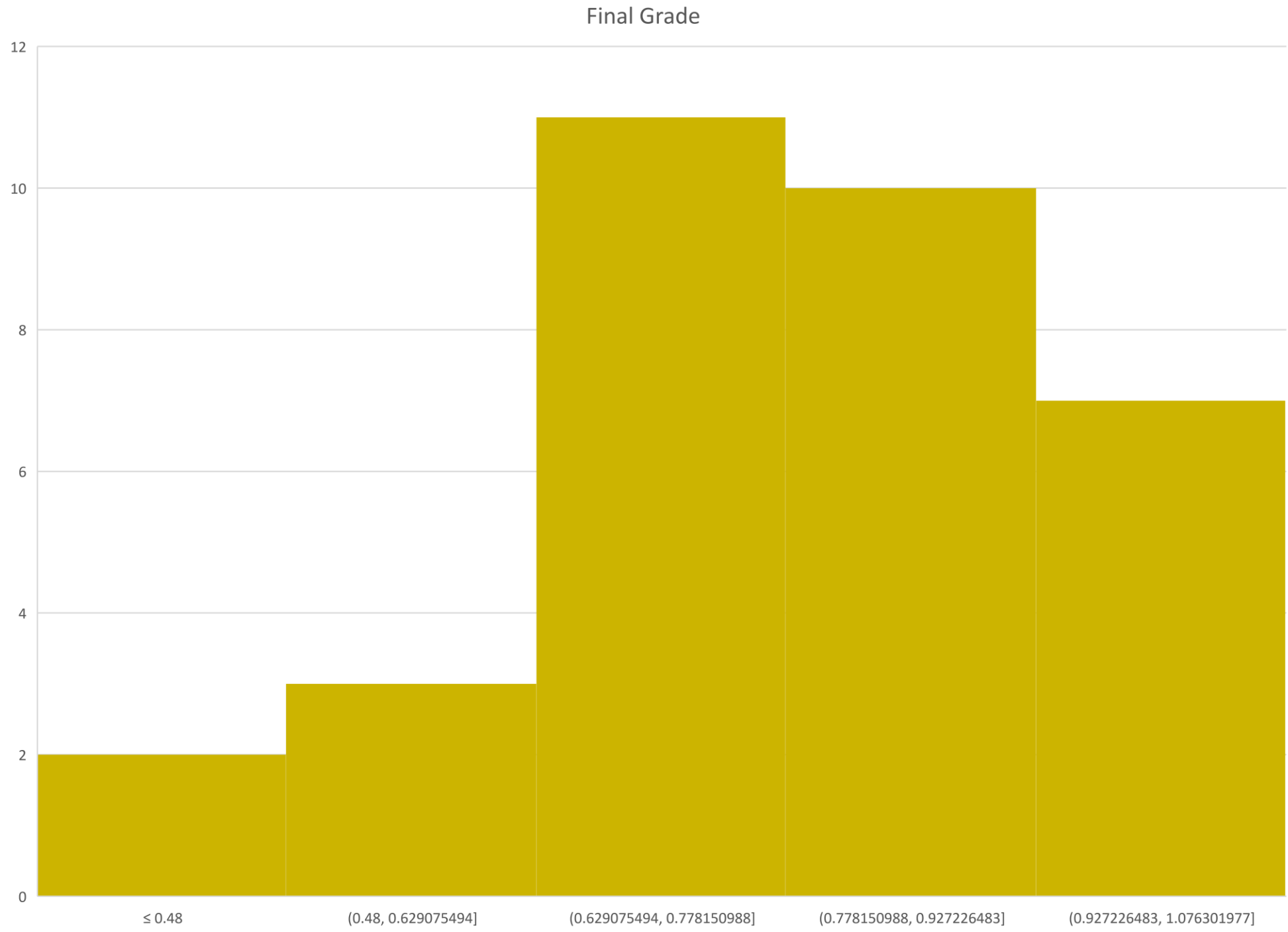
- “Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.”

- http://pathfinder.unm.edu/common/policies/academic-dishonesty.html

Homework

- Finish before end of class.
- Questions can be answered by end of class
- Graded on two things:
  - Complete English Sentences
  - Correct science
- Worth up to 25% of a single test score:
  - Billy has a 100% in his homework grade, a 75% on Test 1, a 100% on Test 2, a 100% on Test 3 and a 100% on Test 4, he would end up with a final grade of a 100% in the class. Billy's homework score has improved his Test 1 score from a 75% to a 100%.
- First Homework assignment is in the syllabus.


Test 1
12
10
8
6
4
2
0
≤ 0.48
(0.48, 0.61]
(0.61, 0.74]
(0.74, 0.87]
(0.87, 1.00]


Final Grade
12
10
8
6
4
2
0
≤ 0.48
(0.48, 0.629075494]
(0.629075494, 0.778150988]
(0.778150988, 0.927226483]
(0.927226483, 1.076301977]

Tests

- Tests provide a learning opportunity.
- Our tests are longer and harder than other astro 101 classes.
- Tests may be curved to account for this.
- This is why in class quizzes are offered.
- The topic that students struggle most with on tests are inverse square laws.

Lecture schedule:

	Topic	Reading
15 Jan	MLK Day- No Lecture	
17 Jan	Introduction -- Quick Tour of the Universe	
22 Jan	Science and the Universe	Chapter 1
24 Jan	The Birth of Astronomy	Chapter 2
29 Jan	Orbits and Gravity	Chapter 3
31 Jan	The Earth, Moon, and Sky	Chapter 4
5 Feb	The Electromagnetic Spectrum	Chapter 5
7 Feb	Astronomical Instruments/Test 1 review	Chapter 6
12 Feb	Test 1	Chapters 1-6
14 Feb	Introduction to the Solar System	Chapter 7
19 Feb	Earth	Chapter 8
21 Feb	Terrestrial Planets and their Moons	Chapter 9-10
26 Feb	The Jovian Planets	Chapter 11
28 Feb	Moons, Rings, Pluto and other Solar System Debris	Chapter 12-13
5 March	The Origin of our Solar System/ Test 2 review	Chapter 14
7 March	Test 2	Chapters 7-14
12 March	SPRING BREAK	
14 March	SPRING BREAK	
19 March	The Sun	Chapter 15-16
21 March	Measuring the Stars	Chapter 17-19
26 March	The Interstellar Medium and Star Formation	Chapter 20-21
28 March	Stellar Evolution	Chapter 22
2 April	Star Death	Chapter 23
4 April	Black Holes/ Test 3 review	Chapter 24
9 April	Test 3	Chapters 15-24
11 April	The Milky Way Galaxy	Chapter 25
16 April	Galaxies	Chapter 26
18 April	Active Galaxies	Chapter 27
23 April	Dark Matter and Galaxies	Chapter 28
25 April	Cosmology	Chapter 29
30 April	Life in the Universe	Chapter 30
2 May	Test 4 Review	
7 May	Test 4	