

# ASTR3000 Contemporary Astronomy

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## Instructor

Dr. Wing H To

## Phone

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## Email

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## Office Location

Naraghi 173

## Office Hours

M: 10-12

T: 9:30-10:30

F: 10-12

## Mastering Astronomy

masteringastronomy.com

CourseID: ASTR3000F17

## Course Overview

Overview of Astronomy today from the point of view of Astrobiology. The course will begin by giving an introduction to life in the Universe. Then we will examine each part of our Universe in more detail beginning on Earth, then our Solar System and finally among the Stars.

## Learning Goals

- Basic quantities and orders of magnitude of phenomena in the Universe
- Be able to examine how life evolve in various environment, one of each is Earth
- Learn about other planets and moons within our Solar System in order to determine the prospect for biology
- Expand our horizontal beyond our Solar System to seek life from far far away

## Required Material

Life in the Universe, 4<sup>th</sup> Edition by Jeff Bennett (min 180 days rental)

Mastering Astronomy Access for the semester

Scientific Calculator

iClicker: any version

Stellarium: Free for download ([www.stellarium.com](http://www.stellarium.com))

## Prerequisite

- Upper Division Standing
- College level algebra and arithmetic

## Resources

- Me: email or office hour visits!
- MasteringAstronomy.com CourseID: ASTR3000F17

## Grading

Component	% of Grade	Late Policy
iClicker	10	Miss up to 3 days
Homework	35	10%/day max 50%
Midterms x 3	35	-
Final	20	-
Total	100	

## Tentative Schedule: Check for Revisions on [masteringastronomy.com](http://masteringastronomy.com)

Week	Readings	Topics
1: Aug 21	Sign up for Mastering Appendixes A-3	Syllabus, Mastering Astronomy and Math Review
2: Aug 28	Chapter 1	The Science of Astrobiology
3: Sept 4	Chapter 2	<b>No Class Monday</b> , The Story of Astronomy
4: Sept 11	Chapter 3	Physical Sciences of our Universe
5: Sept 18	Review for MT1	<b>Review for MT1, Friday MT 1 (MathRev, Ch1-Ch3)</b>
6: Sept 25	Chapter 4	History of Life on Earth
7: Oct 2	Chapter 5	DNA and Evolution
8: Oct 9	Chapter 6	Origin of Life and Extinctions, <b>No Class Weds</b>
9: Oct 16	Review for MT2	Finish Chapter 6, <b>Friday Midterm 2 (Ch4-6)</b>
10: Oct 23	Chapter 7	Life on Moons and Planets in our Solar System
11: Oct30	Chapter 8	Life on Mars
12: Nov 6	Chapter 9	The Jovian Moons, <b>No Class Friday</b>
13: Nov 13	Chapter 10	Planetary Evolution
14: Nov 20	Review for MT3	<b>Weds Midterm 3 (Ch7-10)</b>
15: Nov 27	Chapter 11	Life Beyond our Solar System
16: Dec 4	Chapter 12	Search for Extraterrestrial Intelligence
17: Dec 11	Monday: Final Review, <b>Wednesday : Finals 8:30-10:30 (Comprehensive + Ch 11-13)</b>	