**Lecture & Reading Schedule**

**SPST 200 - Introduction to Space Studies**

**Spring ‘22**

**Updated: April 19, 2022**

**Textbook**: Goldsmith, M. (2021) *The Kingfisher Space Encyclopedia,* Macmillan Publishers, ISBN 978-0-7534-7665-9

**Homework & Exam Schedule**

|  |  |
| --- | --- |
| Date | Item |
| Feb 4 | Homework #1 due |
| Mar 2 | Exam #1 |
| Mar 9 | Homework #2 due |
| Apr 3 | Homework #3 due |
| Apr 20 (Wed) | Exam #2 |
| May 1 (Sun) | Homework #4 due |
| May 11 (Wed) | FINAL EXAM 10:15am – 12:15pm |

**Lecture Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Lec # | Topic | Reading Assignment |
| Jan 12 | 1 | Introduction | Thinking the Unthinkable1 |
| **SECTION 1: ASTRONOMY** | | | |
| Jan 14 | 2 | How the Universe Works: Some Laws & Simple Equations | Kerr (2011) |
| Jan 17 | --- | **No Class – Martin Luther King Jr. Day** |  |
| Jan 19 | 3 | Celestial Sphere | Goldsmith p. 16-19 |
| Jan 21 |
| Jan 24 | 4 | History of Astronomy | Goldsmith p. 32, 64 |
| Jan 26 |
| Jan 28 | 5 | Observing the Universe | Goldsmith p. 22-31 |
| Jan 31 |  | Class canceled (Instructor sick) |  |
| Feb 2 | 6 | Stars – Birth and Life | Goldsmith p. 66-73, 80-85 |
| Feb 4 |
| Feb 7 | 7 | The Deaths of Stars | Goldsmith p. 74-79  Britt (2001) & Eta Carina  Nova Supernova Hypernova |
| Feb 9 |
| Feb 11 |  | Class canceled (weather) |  |
| Feb 14 | 7.2 | “Black Holes & Stuff” | Goldsmith p. 150-151 |
| Feb 16 | 8 | Galaxies and Larger Structures | Goldsmith p. 88-93, 152-153  Cho (2012)  Puzzle of Dark Energy (*Optional, not required*) |
| Feb 18 | 9 | History and Origin of the Universe | Goldsmith p. 94-95 |
| Feb 21 | -- | **No Class – President’s Day** | |
| Feb 23 | 10 | Exoplanets | Goldsmith p. 146-149 |
| Feb 25 | 11 | Exoplanets + Life in the Universe |  |
| **SECTION 2: PLANETARY SCIENCE** | | | |
| Feb 28 |  | Life in the Universe (cont.) |  |
| Mar 2 | **E** | **Exam #1** | **Lectures #1 – 11** |
| Mar 4 | 12 | Life in the Universe + The Sun |  |
| Mar 7 |  | Exam Results |  |
| Mar 9 |  | The Sun & Space Weather |  |
| Mar 11 | 13 | The Earth | Goldsmith p. 42-43 |
| Mar 14 | -- | **No Class --- Spring Break** | |
| Mar 16 | -- |
| Mar 18 | -- |
| Mar 21 | 14 | The Moon | Goldsmith p. 44-45 |
| Mar 23 | 15 | Mercury | Goldsmith p. 38-41 |
| Mar 25 | 16 | Venus | Habitable Venus? |
| Mar 28 |  | Venus / Mars + ET | Goldsmith p. 46-49 |
| Mar 30 | 17 | Mars + ET |  |
| Apr 1 |  | Mars + ET |  |
| Apr 4 | 18 | Jupiter, Saturn and Moons | Goldsmith p. 50-57 |
| Apr 6 | 19 | Dwarf Planets, Comets, Impacts | Goldsmith p. 58-63 |
| **SECTION 3: SPACEFLIGHT** | | | |
| Apr 8 | 20 | Rockets & Spaceflight | Goldsmith p. 98-103 |
| Apr 11 | 21 | Soviet and Russian Space Programs | Zak (2003) |
| Apr 13 | -- | **Cancelled - Blizzard** |  |
| Apr 15 | **--** | **No Class – Easter Break** |  |
| Apr 18 | -- | **No Class – Easter Break** |  |
| Apr 20 | **E** | **Exam #2** | **Lectures #10 - 19** |
| Apr 22 | 21 | Soviet and Russian Space Programs |  |
| Apr 25 | 22 | Early U. S. Space Programs | Goldsmith p. 104-105 |
| Apr 27 | 23 | Apollo | Goldsmith p. 106-109 |
| Apr 29 | 24 | Space Shuttle & Space Transportation | Goldsmith p. 110-111 |
| May 2 | 25 | Space Stations / Space Life Sciences | Goldsmith p. 112-115, 120-123  Quayle (2005) |
| May 4 | 26 | Space Law |  |
| May 6 | -- | **Reading & Review Day** |  |
| May 9 | -- | *Finals Week begins* |  |
| **May 11** |  | **Final Exam**  **Wednesday**  **10:15am – 12:15pm** |  |

1) Additional outside readings are assigned occasionally. These are available as downloadable PDF files on the class website in the “Extra Readings” folder.