

Weekly Class Meeting Schedule

| Monday | Tuesday | Wednesday | Thursday |
|---|---|---|--|
| | | Discussion 01 Observatory 11:00 am – 12:15 pm | Discussion 05 Observatory 11:00 – 12:15 |
| Lecture Cleveland L2 1:15 – 2:30 | Lab X03 or X04 Observatory 1:00 – 3:00 | Discussion 02 – Observatory 1:15 – 2:30 03 – Ciruti 221 04 – Ciruti 225 | Lab X07 or X08 Observatory 1:00 – 3:00 |
| Lab X01 or X02 Observatory 2:40 – 4:40 | | Lab X05 or X06 Observatory 2:40 – 4:40 | |

- We all meet together on Monday afternoon from 1:15 till 2:30 for **lecture**.
- Each student is assigned to one **discussion** section, beginning Sept. 11.
- Each student goes to an afternoon lab **every other week**.
- **Odd-numbered afternoon (“light and everything”) labs** begin during the week of Sept. 16; **even-numbered** labs, the week of Sept. 23.
- **“Universe” labs** will be self-scheduled, beginning Sept. 16.

Course Content in Brief*

| Week of: | Major topics | due on Friday | L & E lab | Self-scheduled U labs |
|----------|--|--|------------------|-----------------------|
| 9/9 | Seven Universes; Powers of Ten; | | | No Lab |
| 9/16 | Lucretius's questions; atomic, micro, organismal spaces | | Ray tracing | Solar coordinates |
| 9/23 | Observer's triangle; planetary, interplanetary, interstellar, intergalactic spaces | | | Sunset point |
| 9/30 | Theory of Light I: Light as a ray | | | Well-calibrated fist |
| 10/7 | “Rays differently refrangible...” | Report 1 (Ray theory) | Newton's Opticks | Constellations |
| 10/14 | mid-semester break | Exam I | No Lab | Lunar coordinates |
| 10/21 | The color perplex. Additive color mixing. | | | Planet observation |
| 10/28 | Eye anatomy: a camera and a trichromaton. | Report 2 (Newton's color theory) | Making Waves | Alberio photo |
| 11/4 | Binocular vision, parallax, and the stars as distant suns | | Electricity | Planetarium visit |
| 11/11 | Theory of Light II: Light as a wave | Report 3 (Ray theory vs. wave theory) | | |
| 11/18 | Light as an electromagnetic wave | Exam II | | Photoelectric |
| 11/25 | Atomic structure | Thanksgiving break | | |
| 12/2 | Theory of Light III: Light as a particle | | effect | |
| 12/9 | Starlight and the Big Bang | Report 4 (photoelectric effect) | No Lab | |
| 12/16 | Exam period | Final exam | | |

Grades will be based on:

- Exams
- Weekly homework
- Lab (satisfactory completion of all assigned labs yields an “A”)
- 4 reports

*Details will be updated on our website: www.mtholyoke.edu/acad/intdept/i42