AU: PHYS-110 Astronomy
WAU: PHYS 150 Descriptive Astronomy
AU: PHYS-110 Astronomy  
WAU: PHYS 150 Descriptive Astronomy  
Consortium of Adventist Colleges and Universities

**Self-Paced Courses**
This course follows a self-paced online format. You have 180 days from your selected start date to complete the course. The last day to withdraw with a full refund is 15 days after your start date.

**Instructor Contact**
Please refer to course in Learning Hub for the teacher contact information.

**Communication with the Instructor**
It is important to remember that while the Internet is available 24 hours a day, your instructor is not. You can expect that your instructor will respond to e-mail message to you within 2 business days during the week and may not be available to respond on weekends.

**Other Assistance**

<table>
<thead>
<tr>
<th>Assistance</th>
<th>Contact Information</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username and password assistance</td>
<td><a href="mailto:helpdesk@andrews.edu">helpdesk@andrews.edu</a></td>
<td>(269) 471-6016</td>
</tr>
<tr>
<td>Enrollment and cancellations</td>
<td><a href="mailto:sderegister@andrews.edu">sderegister@andrews.edu</a></td>
<td>(269) 471-6323</td>
</tr>
<tr>
<td>Bookstore</td>
<td><a href="http://bookstore.mbsdirect.net/andrews.htm">http://bookstore.mbsdirect.net/andrews.htm</a></td>
<td></td>
</tr>
<tr>
<td>Technical assistance with Learning Hub</td>
<td><a href="mailto:dlit@andrews.edu">dlit@andrews.edu</a></td>
<td>(269) 471-3960</td>
</tr>
<tr>
<td>Technical assistance with your Andrews account</td>
<td>andrews.edu/hdchat/chat.php</td>
<td></td>
</tr>
<tr>
<td>Exam requests</td>
<td><a href="mailto:sdeexams@andrews.edu">sdeexams@andrews.edu</a></td>
<td>(269) 471-6566</td>
</tr>
</tbody>
</table>

Any other questions: sde@andrews.edu, (800) 782-4769 or (269) 471-6570

**Part 1: Course Information**

**Course Description**

_Arrdrews University_
Exploring the cosmic environment—the solar system, stars and their development, star clusters, the interstellar medium, galaxies and large-scale features of the Universe. Includes a distance laboratory component and meets the Andrews General Education Physical Science requirement. Does not apply to a major or minor.

_Washington Adventist University_
A non-quantitative course designed especially for the liberal arts student. A look at how our view of the universe has developed and what that current view is. Topics include solar systems and their component, galaxies (composition and types), and lifecycles of stars. One four-hour lecture-laboratory per week and at least one observational field experience.

**Course Prerequisites**

_Arrdrews University_
MPE P2 or MATH 145 or 166 or STAT 285 or equivalent.

Washington Adventist University
30th percentile on ACT/SAT mathematics, MATH 052, or placement test

Course Learning Outcomes
- To convey an appreciation of God’s creativity and power in designing a universe filled with beauty and capable of sustaining life.
- To spark a life-long interest in astronomy.
- To develop an appreciation for the merits and limitations of the methods of science. Contrasts between science and Pseudoscience and Astrology will be drawn. Our dynamic understanding of the Universe will be especially emphasized through historical example. Measurement uncertainties inherent in astronomy will be experienced first-hand through laboratory experiments analyzing astronomical data.
- To highlight the appropriate ways in which science informs Christian faith.
- To convey a sense of the scale and grandeur of the Universe and an appreciation of our purpose for being.

Required Text/Material

Astronomy Lab Kit as listed on the online bookstore, MBS.

**The software, Starry Night, is used for labs and comes with the new textbook. If purchasing a used textbook, please make sure it comes with a copy of this software.

Lab Materials:
- Bathroom Scale (supply your own or order through Griggs: Supply number #2470)
- Stopwatch (supply your own or order through Griggs: Supply #2471)
- Lab kit (Griggs Supply #2475)

If you need to order supplies, email enrollgu@andrews.edu.

Credit Hour and Commitment
This course is offered for 4 semester credits; therefore it is expected that you will spend 180 hours total on this course. Suggested schedule(s) to accomplish this work are included in this syllabus.
Part 2: Course Methods and Delivery

Methods of Instruction
Methods of instruction include assigned readings from the textbook and the course material, journals, assignments, labs, a reaction paper, a presentation, and two exams. Regular participation in the course is essential to good performance.

Course/Technical Requirements
- Internet connection (DSL, LAN, or cable connection desirable).

LearningHub Access
This course is delivered online through LearningHub at http://learninghub.andrews.edu

Your username and password are your Andrews username and password. You need to activate your username and password to access LearningHub.

Please do this online here:
https://vault.andrews.edu/vault/pages/activation/information.jsp if you haven’t already. (269) 471-6016 or email helpdesk@andrews.edu if you need assistance.

If you need technical assistance at any time during the course, or to report a problem with LearningHub, please email dlit@andrews.edu or call 269-471-3960.

Part 3: Course Requirements

Important Note: Activity and assignment details will be explained in detail within each learning module. If you have any questions, please contact your instructor.

Your Schedule
In Learning Hub, you will access online lessons, course materials, and resources. This course is self-paced. You must complete the course within 180 days. This is the Consortium policy. You may have a stricter deadline imposed by graduation, financial aid, or other restrictions.

Start by creating a schedule for completion of the course.
- Determine your deadline. Do you need a transcript sent to your home institution?
- Working from your deadline, count backwards. Allow 2 weeks after you take your final exam for your final grade to be calculated. Allow another 2 weeks for the transcript to be processed and sent.
- Now use the suggested schedules to create a schedule for yourself that ensures completion 4 weeks before your deadline.

Submit your course plan to your instructor within Learning Hub AND discipline yourself to make regular progress.

Assessment Descriptions

Textbook Readings: Read the assigned section of the textbook. Though you may feel somewhat overwhelmed by the volume of material from this first pass, the goal of the course is
not rote memorization of facts. As you proceed, you will find certain ideas consistently emphasized in the text, the lessons, and the homework. Focus on those key principles.

**Lesson Readings:** Carefully read the lessons, especially any detailed information or calculational hints. I have deliberately included specific exam preparation material in the lessons.

**Assignments/Homework (20% of your grade):** Answer the on-line homework questions. Again, many of the exam questions are related to questions you will have encountered in your homework assignments. Your answers to homework questions need not be long-winded and exhaustive. Usually a couple of key ideas with the appropriate terminology will suffice.

**Laboratories (20% of your grade):** As with any science, astronomy is based on observations of the universe. Some of these observations are made within a laboratory, but many are carried out on very distant objects using telescopes, etc. Apply your knowledge with the on-line laboratories found each week on the Learning Hub content page. Each experiment is assigned in conjunction with the corresponding course reading material.

**Journals (10% of your grade):** Please submit a 3-4 paragraph response to the questions in the dropbox (links on the content page). This is a time to reflect and think on the things you have learned during the week.

**Reaction Paper (20 pts; 5% of your grade):** You are required to read one article, book chapter or essay relating faith and astronomy and write a two page reaction paper based on your reading. First, summarize the material from your reading and then write your response. For full credit, the paper should include references to at least three sources. Submit your paper as a Word document for grading and plagiarism checks. Details on the style of the paper may be found at [http://www.ccc.commnet.edu/mla/index.shtml](http://www.ccc.commnet.edu/mla/index.shtml) and a sample paper may be viewed at [http://www.bedfordstmartins.com/hacker/pdf/chicago.pdf](http://www.bedfordstmartins.com/hacker/pdf/chicago.pdf). A list of potential articles, book chapters, web-sites, videos and essays are included at the end of this syllabus. You may choose your own topic if you wish, but should check with the instructor first. If you are uncomfortable writing about the relationship between faith and astronomy, you may pursue a topic relating philosophy and astronomy. The rubric for the reaction paper is found below.

**Presentation (30 pts; 5% of your grade):** Students will summarize the conclusions of their reaction paper in a brief (approximately 10 minute presentation). As a distance-learning student, you will need to videotape your presentation using either a digital video camera, a webcam or a cell phone and upload the video file here for the instructors evaluation. Take pride in presenting your thoughts and the rubric below will be used to evaluate your presentation.

**Rubrics**

**Reaction Paper**

<table>
<thead>
<tr>
<th>Outstanding - 5</th>
<th>Commendable - 3</th>
<th>Acceptable - 1</th>
<th>Not Acceptable - 0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Clearly states essential question and position engaging reader</td>
<td>Clearly states question and position</td>
<td>States question and position</td>
</tr>
<tr>
<td><strong>Support: Development</strong></td>
<td>Thorough, accurate content that relates to topic and supports position, logical sequence of arguments</td>
<td>Accurate content helps support position</td>
<td>Content related to topic</td>
</tr>
</tbody>
</table>
## Conclusion

<table>
<thead>
<tr>
<th>Conclusion</th>
<th>Strong concluding paragraph, summarizes and restates position and highlights of supporting data</th>
<th>Concluding paragraph restating important points</th>
<th>Concluding paragraph</th>
<th>No concluding paragraph</th>
</tr>
</thead>
</table>

## Mechanics

<table>
<thead>
<tr>
<th>Mechanics</th>
<th>Correct grammar, spelling and diction</th>
<th>Few errors in written English</th>
<th>Generally correct English</th>
<th>Many grammatical or spelling errors</th>
</tr>
</thead>
</table>

## Presentation

<table>
<thead>
<tr>
<th></th>
<th>Outstanding - 5</th>
<th>Commendable - 3</th>
<th>Acceptable - 1</th>
<th>Not Acceptable - 0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Powerfully introduces the topic and essential question</td>
<td>Clearly introduces the topic and essential question</td>
<td>Introduces the topic and essential question</td>
<td>Does not introduce the essential question</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Confident, engaging, at ease</td>
<td>Some confidence, engagement and ease</td>
<td>Adequate engagement</td>
<td>Appearance or gestures distract</td>
</tr>
<tr>
<td><strong>Rapport</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organization and Focus</strong></td>
<td>Material is clearly focused, logical sequencing, timing between 8 and 10 minutes</td>
<td>Material is focused, logical with timing between 8 and 10 minutes</td>
<td>Clear introduction and conclusion and within 8 to 10 minutes duration</td>
<td>Logical sequence missing or unclear. Presentation less than 8 minutes and greater than 10 minutes</td>
</tr>
<tr>
<td><strong>Information Content</strong></td>
<td>Information accurate, concise and interesting, Details and examples are used to make information more meaningful</td>
<td>Information accurate and relevant, details and examples are used</td>
<td>Information covers major issues related to topic</td>
<td>Information is inaccurate with important data missing.</td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td>Conclusion answers the essential question and summarizes the presenters informed opinion</td>
<td>Conclusion addresses the essential question</td>
<td>Conclusion summarizes thoughts of presenter</td>
<td>Conclusion does not address the essential question and the presenter expresses no opinion</td>
</tr>
<tr>
<td><strong>Visual Aids</strong></td>
<td>Skillfully executed visual aids are employed which enhance arguments and present evidence</td>
<td>Competently prepared visual aids are employed</td>
<td>Visual aids are employed</td>
<td>Poor-quality Visual aids distract from issue</td>
</tr>
</tbody>
</table>
Materials Used in the Labs

The following items are used in the lab assignments.

LAB 1: Measurement
- Measuring Tape
- Microsoft Excel (or Libre Office)

LAB 2: Celestial Globe
- Starry Night Software

LAB 3: Size of Earth
- Starry Night Software

LAB 4: Distances and Sizes in Astronomy
- Microsoft Paint (Or alternative for Mac)

LAB 5: Drawing Ellipses
- Paper
- Cardboard
- Thumb Tacks (2)
- String
- Camera/Scanner
- Calculator (recommended)

LAB 6: Mercury Orbit
- Starry Night Software
- Protractor
- Graph Paper (Provided if Printed out)
- Printer

LAB 7: Mass of Jupiter
- Starry Night Software

LAB 8: Acceleration Due to Gravity
- Provided Images
- Microsoft Paint
- Microsoft Excel
- Stop Watch
- Nut/Washer
- String
- Ruler
LAB 9: Spectra
  • Microsoft Excel

LAB 10: Lenses and Telescopes
  • The Lenses (4 cm and 12 cm)

LAB 11: Radioactivity
  • 100 Pennies
  • Microsoft Excel (Or a graph with a camera)

LAB 12: Height of Lunar Mountain
  • Microsoft Paint

LAB 13: Moon
  • Starry Night Software

LAB 14: Solar Rotation
  • Microsoft Paint

LAB 15: Blackbody Radiation
  • Microsoft Excel

LAB 16: Stellar Properties
  • Nothing

LAB 17: HR Diagram
  • Starry Night Software
  • Microsoft Excel

LAB 18: Hubble Law
  • Microsoft Paint
  • Microsoft Excel

**Exams**

You are allowed 120 minutes to complete both the midterm exam and the final exam. You must bring your photo ID to the exams. No other materials are required for this exam.

All exams must be supervised by a school or community official, such as a teacher, librarian, registrar, or pastor, who is not related to the student.

The exam request form will available in Learning Hub after you have completed the assignments prior to the exam. The student must state clearly on the exam request form the professional status, job title, or any other qualifications of the supervisor that will aid the testing department in the approval process. If you are attending a college or university, you must use the testing center at that institution. A student living near the Andrews University School of Distance Education main office in Michigan must have the exams supervised at the School of Distance Education testing office. However, the exam request should be sent in ahead of time.

An online exam code cannot be sent to a supervisor who has the same address as the student unless the address is known to be that of a school, mission facility, etc.

All college students must present photo identification to their supervisor’s before taking exams.
If you cannot take your exam by the deadline date, email sdeexams@andrews.edu.

No exam is returned to the student or supervisor. Test grades are sent to the student as soon as the exam is graded. Feedback from the instructor for midterm exams will provide information for studying for future exams.

**Suggested schedule for completion in 8 weeks:**

<table>
<thead>
<tr>
<th>Modules</th>
<th>Lessons</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro</td>
<td>Introduction &amp; Orientation</td>
<td>Orientation Writing Expectations</td>
<td>Submit: Schedule Tell About Me Academic Honesty</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Read Syllabus Read Why Study Astronomy Read Introductory Lesson Watch Introductory Lecture</td>
<td>Preview Assignment Journal 1</td>
</tr>
<tr>
<td></td>
<td>Cycles of the Sky</td>
<td>Read Lesson 1 Read Explorations, Chapter 1 pp. 14 - 37, Cycles of the Sky Watch Lecture 1</td>
<td>Labs 1 &amp; 2 Assignment 1 Journal 2</td>
</tr>
<tr>
<td>2</td>
<td>The Rise of Astronomy</td>
<td>Read Lesson 2 Read Explorations, Chapter 2 pp. 38 – 71, The Rise of Astronomy and Backyard Astronomy Watch Lecture 2</td>
<td>Labs 3 - 6 Assignment 2</td>
</tr>
<tr>
<td>3</td>
<td>Newton's Laws</td>
<td>Read Lesson 3 Read Explorations, Chapter 3 pp. 72 - 87, Gravity and Motion Watch Lecture 3</td>
<td>Labs 7 &amp; 8 Assignment 3 Journal 3</td>
</tr>
<tr>
<td></td>
<td>Light, Atoms and Telescopes</td>
<td>Read Lesson 4 Read Explorations, Chapter 4 - 5 pp. 88 - 145, Light and Atoms and Telescopes Watch Lectures 4, 4a, 4b</td>
<td>Labs 9 &amp; 10 Assignment 4 Journal 4</td>
</tr>
<tr>
<td>4</td>
<td>Earth, Moon and Time</td>
<td>Read Lesson 5 Read Explorations, Chapter 6 – 7 pp. 146 - 199, The Earth and Moon Watch Lectures 5, 5a, 5b, 5c</td>
<td>Labs 11 - 13 Assignment 5 Journal 5</td>
</tr>
<tr>
<td></td>
<td>The Solar System</td>
<td>Read Lesson 6 Read Explorations, Chapter 8 pp. 200 – 223, Survey of the Solar System Watch Lectures 6, 6a, 6b, 6c, 6d</td>
<td>Assignment 6 Journal 6</td>
</tr>
<tr>
<td></td>
<td>Midterm Exam</td>
<td></td>
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<tr>
<td>5</td>
<td>The Sun</td>
<td>Read Lesson 7 Read Explorations, Chapter 12 pp. 304 – 327, The Sun, Our Star Watch Lecture 7</td>
<td>Lab 14 Assignment 7 Journal 7</td>
</tr>
<tr>
<td></td>
<td>Stars</td>
<td>Read Lesson 8 Read Explorations, Chapter 13 pp. 328 – 359, Measuring the Properties of Stars Watch Lecture 8</td>
<td>Labs 15 - 17 Assignment 8 Journal 8</td>
</tr>
<tr>
<td>6</td>
<td>Stellar Evolution</td>
<td>Read Lesson 9 Read Explorations, Chapter 14 pp. 360 – 389, Stellar Evolution Watch Lecture 9</td>
<td>Assignment 9 Journals 9</td>
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<tr>
<td></td>
<td>Stellar Death</td>
<td>Read Lesson 10 Read Explorations, Chapter 15 pp. 390 – 411, Stellar Remnants Watch Lecture 10</td>
<td>Assignment 11 Assignment 12 Assignment 13 Assignment 14</td>
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<tr>
<td>Modules</td>
<td>Lessons</td>
<td>Readings</td>
<td>Assignments</td>
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<tr>
<td>7</td>
<td>Milky Way Galaxy</td>
<td>Read Lesson 11&lt;br&gt;Read Explorations, Chapter 16 pp. 412 – 443, The Milky Way Galaxy&lt;br&gt;Watch Lecture 11</td>
<td>Journal 10</td>
</tr>
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<td></td>
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</tr>
<tr>
<td>7</td>
<td>Galaxies</td>
<td>Read Lesson 12&lt;br&gt;Read Explorations, Chapter 17 pp. 444 – 479, Galaxies. Part I: Ordinary Galaxies&lt;br&gt;Watch Lecture 12</td>
<td>Lab 18&lt;br&gt;Assignment 15&lt;br&gt;Assignment 16&lt;br&gt;Assignment 17&lt;br&gt;Assignment 18&lt;br&gt;Journal 11</td>
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</tr>
<tr>
<td>7</td>
<td>Cosmology</td>
<td>Read Lesson 13&lt;br&gt;Read Explorations, Chapter 18 pp. 480 – 507, Cosmology.&lt;br&gt;Watch Lecture 13</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td></td>
<td>Journal 12&lt;br&gt;Reaction Paper&lt;br&gt;Final Presentation</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Semester Exam</td>
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</table>

**Suggested schedule for completion in 16 weeks:**

<table>
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<tr>
<th>Modules</th>
<th>Lessons</th>
<th>Readings</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>Intro</td>
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<td>Orientation&lt;br&gt;Writing Expectations</td>
<td>Submit: Schedule&lt;br&gt;Tell About Me Academic Honesty</td>
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<td>Preview Assignment&lt;br&gt;Journal 1</td>
</tr>
<tr>
<td>2</td>
<td>Cycles of the Sky</td>
<td>Read Lesson 1&lt;br&gt;Read Explorations, Chapter 1 pp. 14 - 37, Cycles of the Sky&lt;br&gt;Watch Lecture 1</td>
<td>Labs 1 &amp; 2 Assignment 1&lt;br&gt;Journal 2</td>
</tr>
<tr>
<td>3</td>
<td>The Rise of Astronomy</td>
<td>Read Lesson 2&lt;br&gt;Read Explorations, Chapter 2 pp. 38 – 71, The Rise of Astronomy and Backyard Astronomy&lt;br&gt;Watch Lecture 2</td>
<td>Labs 3 - 6 Assignment 2</td>
</tr>
<tr>
<td>4</td>
<td>Newton's Laws</td>
<td>Read Lesson 3&lt;br&gt;Read Explorations, Chapter 3 pp. 72 - 87, Gravity and Motion&lt;br&gt;Watch Lecture 3</td>
<td>Labs 7 &amp; 8 Assignment 3&lt;br&gt;Journal 3</td>
</tr>
<tr>
<td>5</td>
<td>Light, Atoms and Telescopes</td>
<td>Read Lesson 4&lt;br&gt;Read Explorations, Chapter 4 - 5 pp. 88 - 145, Light and Atoms and Telescopes&lt;br&gt;Watch Lectures 4, 4a, 4b</td>
<td>Labs 9 &amp; 10 Assignment 4&lt;br&gt;Journal 4</td>
</tr>
<tr>
<td>6</td>
<td>Earth, Moon and Time</td>
<td>Read Lesson 5&lt;br&gt;Read Explorations, Chapter 6 – 7 pp. 146 - 199, The Earth and Moon&lt;br&gt;Watch Lectures 5, 5a, 5b, 5c</td>
<td>Labs 11 – 13 Assignment 5&lt;br&gt;Journal 5</td>
</tr>
<tr>
<td>7</td>
<td>The Solar System</td>
<td>Read Lesson 6&lt;br&gt;Read Explorations, Chapter 8 pp. 200 – 223, Survey of the Solar System&lt;br&gt;Watch Lectures 6, 6a, 6b, 6c, 6d</td>
<td>Assignment 6&lt;br&gt;Journal 6</td>
</tr>
<tr>
<td>8</td>
<td>Midterm Exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The Sun</td>
<td>Read Lesson 7&lt;br&gt;Read Explorations, Chapter 12 pp. 304 – 327, The Sun, Our Star&lt;br&gt;Watch Lecture 7</td>
<td>Lab 14&lt;br&gt;Assignment 7&lt;br&gt;Journal 7</td>
</tr>
<tr>
<td>10</td>
<td>Stars</td>
<td>Read Lesson 8&lt;br&gt;Read Explorations, Chapter 13 pp. 328 – 359, Measuring the Properties of Stars&lt;br&gt;Watch Lecture 8</td>
<td>Labs 15 – 17 Assignment 8&lt;br&gt;Journal 8</td>
</tr>
</tbody>
</table>
## Modules | Lessons | Readings | Assignments
---|---|---|---
11 | Stellar Evolution | Read Lesson 9  
Read Explorations, Chapter 14 pp. 360 – 380, Stellar Evolution  
Watch Lecture 9 | Assignment 9  
Assignment 10  
Journal 9
12 | Stellar Death | Read Lesson 10  
Read Explorations, Chapter 15 pp. 390 – 411, Stellar Remnants  
Watch Lecture 10 | Assignment 11  
Assignment 12  
Assignment 13  
Assignment 14  
Journal 10
| Milky Way Galaxy | Read Lesson 11  
Read Explorations, Chapter 16 pp. 412 – 443, The Milky Way Galaxy  
Watch Lecture 11 | |
13 | Galaxies | Read Lesson 12  
Read Explorations, Chapter 17 pp. 444 – 479, Galaxies. Part I: Ordinary Galaxies  
Watch Lecture 12 | Lab 18  
Assignment 15  
Assignment 16  
Assignment 17  
Assignment 18  
Journal 11
| Cosmology | Read Lesson 13  
Read Explorations, Chapter 18 pp. 480 – 507, Cosmology.  
Watch Lecture 13 | |
14 | | Journal 12  
Reaction Paper  
Final Presentation | Semester Exam

### Completing Assignments
All assignments for this course will be submitted electronically through Learning Hub unless otherwise instructed. Assignments and exams must be completed within 180 days of course registration date. This timeframe is subject to change depending on deadlines set by your home institution.

### Part 4: Grading Policy

#### Graded Course Activities

<table>
<thead>
<tr>
<th>Percent %</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Journals 1-12</td>
</tr>
<tr>
<td>20</td>
<td>Assignments 1-18</td>
</tr>
<tr>
<td>20</td>
<td>Labs 1-18</td>
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<tr>
<td>20</td>
<td>Midterm Exam</td>
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<tr>
<td>25</td>
<td>Final Exam</td>
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<tr>
<td>5</td>
<td>Reaction Paper</td>
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<tr>
<td>5</td>
<td>Presentation</td>
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<tr>
<td>100</td>
<td>Total Percent Possible</td>
</tr>
</tbody>
</table>

### Viewing Grades in Learning Hub
- Click into the course.
- Click on the Grades link in the Settings Box to the left of the main course page.

### Letter Grade Assignment

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
</tr>
<tr>
<td>Letter Grade</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>A-</td>
<td>90-92%</td>
</tr>
<tr>
<td>B+</td>
<td>88-89%</td>
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<tr>
<td>B</td>
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<td>B-</td>
<td>80-82%</td>
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<tr>
<td>C+</td>
<td>78-79%</td>
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<td>C</td>
<td>73-77%</td>
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<td>C-</td>
<td>70-72%</td>
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<td>D</td>
<td>60-69%</td>
</tr>
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<td>F</td>
<td>0-59%</td>
</tr>
</tbody>
</table>

**Part 5: Course Policies**

**Incomplete Policy**
An Incomplete (I) indicates that the student’s work is incomplete because of illness or unavoidable circumstances and not because of negligence or inferior performance. Students will be charged an incomplete fee for each incomplete grade issued.

**Maintain Professional Conduct Both in the Classroom and Online**
The classroom is a professional environment where academic debate and learning take place. Your instructor will make every effort to make this environment safe for you to share your opinions, ideas, and beliefs. In return, you are expected to respect the opinions, ideas, and beliefs of other students—both in the face-to-face classroom and online communication. Students have the right and privilege to learn in the class, free from harassment and disruption.

**Academic Accommodations**
Students who require accommodations may request an academic adjustment as follows:
1. Read the Andrews University Disability Accommodation information at [https://www.andrews.edu/services/sscenter/disability/](https://www.andrews.edu/services/sscenter/disability/)
2. Download and fill in the disability form at [http://www.andrews.edu/services/sscenter/disability/accommodationsreqform.pdf](http://www.andrews.edu/services/sscenter/disability/accommodationsreqform.pdf). Preferably type answers. To save a digital copy, 1) print to file and save or 2) print and scan. Email the completed form and disability documentation (if any) to [success@andrews.edu](mailto:success@andrews.edu) or fax it to 269-471-8407.
3. Email [sdestudents@andrews.edu](mailto:sdestudents@andrews.edu) to inform the School of Distance Education that a disability has been reported to Student Success.

**Commitment to Integrity**
As a student in this course, and at the university, you are expected to maintain high degrees of professionalism, commitment to active learning, participation in this course, and integrity in your behavior in and out of this online classroom.

**Honesty**
Using the work of another student or allowing work to be used by another student jeopardizes not only the teacher-student relationship but also the student’s academic standing. Lessons may be discussed with other students, tutors may help to guide a student’s work, and textbooks,
encyclopedias and other resource materials may be used for additional assistance, but the actual response must be the student’s own work.

Exams must be completed in the presence of an approved supervisor without the assistance of books, notes, devices or outside help unless otherwise specified in the exam directions. The student should have no access to the exam either before or after it is taken. A student who gives information to another student to be used in a dishonest way is equally guilty of dishonesty. Any violation of this policy will be taken before the Higher Education Academic and Curriculum Committee for appropriate punitive action.

**Part 6: Resources for Paper and Presentation**

The following resources deal with topics suitable for your paper and presentation. Choose a topic from one source listed below. Your reaction paper and presentation will be based on information and ideas gleaned from the source. If you wish to pursue a topic not covered by any of the sources listed below, please contact the professor and discuss your plans in advance.

**Videos**

1. Galileo’s Battle for the Heavens - Biography of Galileo
2. A Private Universe:
   a. Preconceived notions interfere with learning
   b. The Doomsday Asteroid
   c. Asteroids that could demolish the earth
   d. Show Me God - Modern Cosmology provides evidence for God
4. Science and Religion: An overview (are religion and science at war?)
5. Science and Religion: Let there be light and the big bang
6. Science and Religion: Creation and evolution
7. Beyond the Postmodern Mind: Do materialistic values of science lead to loss of meaning?
8. Faith and Reason: Interviews with scientists for views on science and philosophy
9. Science and the Spirit:
10. Soul:
    a. Part I: Challenges to Big Bang and the creation of life
    b. Part II: Knowledge of the Natural World has failed to answer life’s important questions.
    c. Part III: Science cannot decipher all aspects of the human mind
11. Facts of Faith: experiments that teach about God (Elementary School Level)

**Books**

“Seventh-day Adventists Believe: A Biblical Exposition of the 27 fundamental Doctrines”, General Conference of Seventh-day Adventists, Ministerial Department, 1988. You must interview a local pastor about how flexible (or inflexible) these beliefs are. You may chose to focus on belief #6, Creation.


Ch. 1: Martian Rocks
Ch. 7: The Bible and the Big Bang
Ch. 8: Evidences for Design
Ch. 9: Alternative Explanations for Design
Ch. 11: Is the Gospel Logical?


“Miracles”, Chapter 3 (The Self-Contradiction of the Naturalist)

“Miracles”, Chapter 8 (Miracles and the Laws of Nature)


“Rare Earth”, Peter Ward and Donald Brownlee, Chapter 12 (Assessing the Odds), Copernicus Books, 2004.

“A Brief History of Time”, Stephen Hawking, Chapter 8 (The Origin and Fate of the Universe), Bantam, 1988.


**Web Sites**
http://www.reasons.org/articles/design-and-the-anthropic-principle
Hugh Ross, Design and the Anthropic Principle
Anthropic Principle

http://www.leaderu.com/truth/1truth15.html


**People**

Interview a theologian about how modern astronomy informs his faith or interview an astronomer or physicist about the appropriateness of a relationship between faith and science. You may use the phone or email to conduct interviews.

**Articles**


(Warning: an example of perhaps trying to read too much into the sky, without applying the scientific method)


