Galaxies, the Universe, and Cosmology
Astronomy 120
Winter 2013 Syllabus

Instructor
• Frank Skorina

Location
• WWCC North Campus

Course Description
This course explores our galaxy, other galaxies, and our universe. It also covers the origin of our universe and extraterrestrial life.

Class Schedule
• Monday, Wednesday, Friday 6:00 pm to 8:30 pm
• Twenty-four classes will be held
• Final exam is on the last class, on or after Monday, March 1

Materials
• In Quest of the Universe, 5th Edition; by Kuhn and Koupelis, 2007
• Scientific calculator

Grading
• Three Exams, 40%
• Final Exam, 20%
• Labs Exercises, 20%
• Quizzes, 10%
• Report, 10%
• Grade Table where x is the percent of points earned:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 ≤ x &lt; ∞</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>90 ≤ x &lt; 93</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>87 ≤ x &lt; 90</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>83 ≤ x &lt; 87</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>80 ≤ x &lt; 83</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>77 ≤ x &lt; 80</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>73 ≤ x &lt; 77</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>70 ≤ x &lt; 73</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>67 ≤ x &lt; 70</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>60 ≤ x &lt; 67</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-∞ ≤ x ≤ 60</td>
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</table>
Exams
- Three exams during the quarter consisting of a variety of question types.
- One comprehensive final exam.
- Make-Up exams will only be given when I have been notified in advance with a verifiable reason that I determine is adequate.

Labs
After each lab session there will be a worksheet, or lab write-up to be handed in. This will be due on the Friday following the lab. Late labs will be accepted up to one week late, but will receive a substantial grade reduction.

Homework
There are review questions at the end of each chapter in the textbook. Although I will not be collecting homework, I strongly urge you to write out each of the answers. There will be no better method of studying for tests and the final than going over the answers to these review questions and reading through your lecture notes.

Report
A research report is required for this class. This report can be on any astronomical topic, but instructor approval is required. The report will be due around February 22. More information forthcoming.

Quizzes
There will be a number of quizzes given during the quarter. Quizzes will be on the material just covered, usually from the previous lecture. The top 80% of the quizzes will count towards the final quiz grade. Quizzes will be graded out of 5. There will not be any opportunity to make up quizzes.

Outline
Chapter 1: The Quest Ahead
Chapter 16: The Milky Way Galaxy
Exam 1
Chapter 17: A Diversity of Galaxies
Exam 2
Chapter 18: Cosmology: The Nature of the Universe
Exam 3
Chapter 19: The Quest for Extraterrestrial Intelligence
Final Exam

Disclaimer
Instructor reserves the right to make changes to this syllabus at any time.
**Weekly Schedule**

**Week #1, March 26 – March 30**
- Overview
- Prolog – The Quest Ahead

**Week #2, April 2 – April 6**
- Chapter 16 – The Milky Way Galaxy (Sections 1-4)

**Week #3, April 9 – April 13**
- Chapter 16 – The Milky Way Galaxy (Sections 5-6)
- Exam #1 on Friday, April 13 (Prolog & Chapter 16)

**Week #4, April 16 – April 19**
- Chapter 17 – A Diversity of Galaxies (Sections 1-2)
- Faculty In-service Friday, April 20 – No class

**Week #5, April 23 – April 27**
- Chapter 17 – A Diversity of Galaxies (Sections 3-4)

**Week #6, April 30 – May 4**
- Chapter 17 – A Diversity of Galaxies (Sections 5-6)
- Exam #2 on Friday, April 27 (Chapter 17)

**Week #7, May 7 – May 11**
- Chapter 18 – Cosmology: The Nature of the Universe (Sections 1-3)

**Week #8, May 14 – May 18**
- Chapter 18 – Cosmology: The Nature of the Universe (Sections 4-6)

**Week #9, May 21 – May 25**
- Chapter 18 – Cosmology: The Nature of the Universe (Sections 7)
- Advising Day Tuesday, May 22 – No class
- Exam #3 on Friday, May 25 (Chapter 18)

**Week #10, May 29 – June 1**
- Memorial Day Monday, May 28 – No class
- Chapter 19 – The Quest for Extraterrestrial Intelligence

**Week #11, June 4 – June 7**
- Catch-up/Review
- No Class Wednesday
- Final Exam on Wednesday, June 6 (Prolog & Chapters 16-19)

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