

GEOG 104 – Earth and Space Science

Lecture Section 030, Lab Section **031** (M 12 p.m. – 1:40 p.m.) & **032** (M 2 p.m. – 3:40 p.m.)
Spring 2012

Instructor: Dr. Darren B. Parnell

Office: Henson Hall 157E

Office Hours: Monday – Friday 11 a.m. to noon (also by appointment)

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Class Meetings: T, Th 8 a.m. – 9:15 a.m.; Henson Hall 148

Texts: Brent Zaprowski. *Earth and Beyond: An Introduction to Earth-Space Science*, 2nd Edition. Kendall-Hunt, 2009. **This is an e-book!**

Brent Zaprowski. *Earth and Beyond: An Introduction to Earth-Space Science Laboratory Manual*, 5th Edition. Kendall-Hunt, 2011.

Course Description: This course was designed for elementary school teachers in conjunction with the School of Education and is based on the K-8 National Science Education Standards found at: (www.nap.edu/readingroom/books/nses/html/overview.html#content). The “standards” require that the class cover a wide range of topics from earth science, climate and space sciences. Thus, the lab and class material will only cover the major highlights for each topic. Because this class is designed for future teachers, you will not only learn about earth sciences, but you will learn **how to teach earth sciences**. As you will discover, knowing the material well enough to pass a test is one thing, but knowing the material well enough to teach it requires thorough knowledge of the material.

Exams: This course has a total of three exams worth 100 points each. Exam questions will come from class lectures and the e-book. Each exam will be administered as scheduled. All exams count for a portion of the final grade; none can be dropped.

Make-up Exams: Any student missing an exam will be required to take an alternative examination. It is the **student’s responsibility** to inform the instructor of the missed exam **within one class day** after the original exam is given. Any student who misses an exam or lab practical during the semester will make up the exam on May 7th during your scheduled lab section. Anyone failing to comply with this policy will receive a **zero** for the missed exam.

In-Class Exercises/Quizzes: In class assignments can range from short open notebook quizzes to other interesting projects or videos. **Pop quizzes are held at the beginning of class. If you miss the quiz because you come to class late, you can’t make up the quiz!** The primary purpose of these assignments is to get you to come to class, so they will not be difficult if you pay attention and take good notes. **Late in-class assignments or pop quizzes cannot be made up except for illness.** Illnesses must be confirmed with a doctor’s note. There are no acceptable excuses for missing class except for “official” holidays and religious holidays. University policy clearly states that athletic events or field trips are not to be considered acceptable excuses for missing classes. However, I will excuse students for athletic or academic activities provided they make arrangements ahead of time and bring me a note from the coach or professor in charge of the activity. In-class exercises/quizzes are worth a total of **50 points**.

On-line quizzes: Your e-book has 17 chapter quizzes worth 10 points each. The on-line quizzes are worth a total of **150 points**; **the two lowest graded quizzes will be dropped**. The on-line quizzes must be completed by **8 p.m.** on the assigned day. The quizzes will allow me to determine if you have read the assigned material.

Lab Policies: The lab portion of the course counts as 28.5% of your final grade!

- You **MUST** bring your own lab book to every lab. *The lab book must be new and not written in.* We can provide calculators in lab or you can use your own.
- There will be two lab practicals, worth **75 points** each, given at the **beginning** of the lab period. If you are late for lab and miss the practical, you will get **0 points**. For lab practicals, we will provide calculators. **You will not be able to use your own calculators for lab practicals.**
- **50 points** are awarded for lab attendance provided you **attend and complete** at least 10 out of the 11 labs during the semester. If you complete **less than 10** lab exercises, you get **0 points** for lab attendance. You can make up missed labs in other sections **with instructor approval**. You must also bring me a signed slip from the lab instructor proving you made up the lab.
- **YOU MUST SHOW YOUR COMPLETED WORK TO THE PROFESSOR BEFORE YOU CAN SIGN OUT.** You can't just show up and leave after 10 minutes and have that count for attendance. Lab exercises are not graded, and the answers for the lab exercises **are posted on MyClasses on Thursday afternoons at 5:00 p.m.**

Grades: This course has a total of 700 points. Each student's grade for this course will be determined by a percentage based on the total points accumulated by that individual, divided by the total number of points possible (700). Letter grades will be assigned as follows:

Letter Grade	Percentage of Points	Total Points
A	90.00 – 100%	630 – 700
B	80.00 – 89.99%	560 – 629
C	70.00 – 79.99%	490 – 559
D	60.00 – 69.99%	420 – 489
F	0.00 – 59.99%	Below 420

Attendance: Attending class is important. Coming to class, paying attention and taking notes is perhaps the best way to learn the course material. Most lectures will come from the e-book, but some material will only be presented in class.

Classroom Environment: Students are expected to contribute to an environment appropriate for learning that considers and respects the needs and rights of others. Any academic misconduct will be confronted and handled accordingly. Do not arrive late and do not leave early.

Electronics Policy: Due to the rapid advancements in technology I have instituted a policy on the use of various electronic devices in lecture and lab. **All electronics devices must be silenced and put away completely out of sight while in class. NO TEXTING!!!** You will receive one warning for the first infraction. After that I can penalize you 5 points for each subsequent infraction. MP3 players are also prohibited.

Academic Integrity: Cheating, plagiarism and other forms of academic dishonesty will not be tolerated in this course. Students should pay special attention to the expectations discussed in the Student Handbook and 2010-2012 University Catalog. Violating these rules will result in significant grade penalties up to and including a failing grade for the course. Extreme cases of academic misconduct can result in expulsion from the University.

Writing Across the Curriculum: All writing assignments, both formal and informal, are in support of Salisbury University's Writing Across the Curriculum Program.

Changes to Syllabus: This syllabus may be modified or changed by the instructor as necessary. Students will be notified of the changes in class.

Approximate Schedule – Earth and Space Science Lecture – Spring 2012

Week	Date	Subject	Chapter	Module
1	T, 1/31	Places, Spaces and Gradients: Mapping Science	2	9 - 13
	Th, 2/2	The Universe: It Has Everything	3	14 - 16
2	T, 2/7	Born of Fire: The Geosphere	4	17 - 18
	Th, 2/9	Born of Fire: The Geosphere		19
3	T, 2/14	The Gasses That Surround Us: The Atmosphere	5	20 - 21
	Th, 2/16	The Gasses That Surround Us: The Atmosphere		21 - 22
4	T, 2/21	The Liquid of Life: The Hydrosphere	6	23 - 24
	Th, 2/23	The Liquid of Life: The Hydrosphere		24 - 25
5	T, 2/28	A Perfect Balance is Achieved: The Biosphere	7	26
	Th, 3/1	Exam #1 – (Modules 9 - 26)		
6	T, 3/6	Weather Forecasting	8	27 - 28
	Th, 3/8	Weather Forecasting		28 - 30
7	T, 3/13	Weather Forecasting		30 - 31
	Th, 3/15	The Scourge of the Earth: Thunderstorms, Tornadoes and Hurricanes	9	32 - 33
8	T, 3/20	Spring Break – No Classes!		
	Th, 3/22	Spring Break – No Classes!		
9	T, 3/27	Hurricanes & Climate: "Average Weather"	9 & 10	34 - 35
	Th, 3/29	Climate: "Average Weather"	10	35
10	T, 4/3	The Rocks We Walk On	11	36 - 37
	Th, 4/5	The Rocks We Walk On		38 - 39
11	T, 4/10	Exam #2 – (Modules 27 - 39)		
	Th, 4/12	The Forces That Build the Land Up	12	40 - 41
12	T, 4/17	The Forces That Build the Land Up & The Forces That Tear the Land Down	12 & 13	41 - 42
	Th, 4/19	The Forces That Tear the Land Down	13	42 - 43
13	T, 4/24	The Forces That Tear the Land Down		43 - 44
	Th, 4/26	Our Ever-Changing Coasts	14	45 - 46
14	T, 5/1	Introduction to Astronomical Techniques	15	47 - 48
	Th, 5/3	The Solar System	16	49 - 51
15	T, 5/8	The Solar System & Beyond the Solar System	16 & 17	52 - 53
	Th, 5/10	Beyond the Solar System: Stars and Galaxies	17	54
		Final Exam – Friday, May 18, 8:00 a.m.		

Changes to Syllabus: This syllabus may be modified or changed by the instructor as necessary. Students will be notified of the changes in class.

Approximate Schedule – Earth and Space Science Lab – Spring 2012

ALL LABS MEET IN HENSON ROOM 160

Lab	Date	Subject	Exercise
1	1/30	Basic Math Concepts, the Metric System and Basic Geographic Concepts	1 & 2
2	2/6	Basics of Map Interpretation and Google Earth	3
3	2/13	Introduction to Plate Tectonics	8
4	2/20	Historical Geology: Fossils and Relative Dating	9 & 10
5	2/27	Earth-Sun Relationships, Solar Radiation and Albedo	4
6	3/5	Surface Waters, Groundwater and the Oceans	13
	3/12	Lab Practical #1 Labs 1-6	
	3/19	Spring Break – No Labs!	
7	3/26	Moisture, Atmospheric Pressure and Winds	5 & 6
8	4/2	Weather Forecasting	7
9	4/9	Minerals and Rocks	11
10	4/16	Earthquakes, Floodplains and Flood Frequency	12 & 14
11	4/23	Introduction to Coastal Processes and Astronomy	15 & 16
	4/30	Lab Practical #2 Labs 7-11	
	5/7	Make-up Exams	

On-Line Chapter Quiz Due Dates

Chapter Quiz	Due Date
1 - 7	Wednesday, February 29
8 - 11	Monday, April 9
12 - 17	Friday, May 11

Important University Dates for Spring 2012

Last day to drop/add – Friday, February 3, 2012

Last day to withdraw from course to receive a “W” – Friday, April 6, 2012

Commencement Exercises – Saturday, May 19, 2012