Instructor: Dr. Kevin Hobbs  Email: khobbs84@unm.edu  Office: A-132A  Phone: 925-8876
Office hours: Mondays 10:30 – 12:00; Wednesdays 1:00 – 3:30; Thursdays 2:45 – 3:45
Learning Center hours: Tuesdays 10:00 – 12:00
Class time and location: Mondays 3:00 – 5:30 in VAHS 108
Supplies needed: Notebook or binder with lined paper, pencils; some students prefer different colors of pens/pencils for note-taking and diagrams

SCHEDULE (subject to adjustment; stay tuned for changes)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>16-Jan</td>
<td>No class – UNM closed in observance of Martin Luther King, Jr., Day</td>
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<td>2</td>
<td>23-Jan</td>
<td>Introduction; review of fundamental concepts of geology; relating concepts to NM</td>
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<td>3</td>
<td>30-Jan</td>
<td>Review of fundamentals; geography; geologic time; New Mexico in the Proterozoic Eon</td>
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<td>4</td>
<td>6-Feb</td>
<td>NM in the Paleozoic; continental shifts recorded in NM rocks</td>
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<td>5</td>
<td>13-Feb</td>
<td>Permianland: What NM tells us about the Permian Period</td>
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<tr>
<td>6</td>
<td>20-Feb</td>
<td>Permianland: What NM tells us about the Permian Period</td>
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<td>7</td>
<td>27-Feb</td>
<td>The Jurassic Period in NM and surroundings</td>
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<td>8</td>
<td>6-Mar</td>
<td>The Cretaceous Period in NM and surroundings: rising and falling oceans and mountains</td>
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<td>9</td>
<td>13-Mar</td>
<td>No Class – UNM closed for Spring Break</td>
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<td>10</td>
<td>20-Mar</td>
<td>The Cenozoic in New Mexico</td>
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<td>11</td>
<td>27-Mar</td>
<td>The Laramide Orogeny: causes; effects; where it is and where it isn’t in NM</td>
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<td>12</td>
<td>3-Apr</td>
<td>OIL! or, Hydrocarbon geology in New Mexico (northwest and southeast NM)</td>
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<td>13</td>
<td>10-Apr</td>
<td>The Rio Grande Rift: Introduction; geography, major geological features</td>
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<td>14</td>
<td>17-Apr</td>
<td>The Rio Grande Rift in central NM, including Valencia County and the Manzano Mountains</td>
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<td>15</td>
<td>24-Apr</td>
<td>Volcanoes of NM: introduction and relation to underlying geological processes</td>
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<td>16</td>
<td>1-May</td>
<td>Local volcanoes: Tome Hill, Los Lunas Volcano, Isleta Volcano</td>
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<tr>
<td>17</td>
<td>8-May</td>
<td>Review; wrap-up</td>
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A note on class schedule: The schedule included above will serve as a general outline for the semester. Dates and topics might change as needs arise. Changes will be posted ASAP.

COURSE OBJECTIVES

Students will understand and be able to explain the following:

1. The tectonic forces responsible for the major landforms of New Mexico (NM) through the interpretations of geologic and topographic maps, structural geological data, published literature, and field investigations. *(i.e., structural geology and geomechanics)*
2. Geologic time and the sequence of major geologic events in NM. *(i.e., historical geology and stratigraphy)*
3. The environments of deposition/eruption/emplacement, paleolandscape significance, and the sedimentary/volcanologic/intrusive processes responsible for the rock units of NM. *(i.e., sedimentology, volcanology, and petrology)*
4. The surficial processes that have shaped the modern NM landscape. *(i.e., geomorphology)*
COURSE POLICIES

GRADING
Quizzes: 15%
Homework: 15%
Map exercises: 25%
Exams: 45%
Total: 100%

GRADE SCALE:
98+ = A+  92-97 = A  90-91 = A-
88-89 = B+  82-87 = B  80-81 = B-
78-79 = C+  72-77 = C  70-71 = C-
68-69 = D+  62-67 = D  60-61 = D-

EXAMS:
Three exams will be given during the semester on the following dates: 20 February, 27 March, and 1 May. Each exam will be worth ~15% of the final grade.

QUIZZES:
There will be five in-class quizzes throughout the semester. These quizzes will cover a combination of the two preceding lectures and the reading assignment for the day’s class. Each quiz will be worth 3% of the final grade.

MAP EXERCISES:
There will be three geologic map exercises throughout the semester. Each exercise will be worth ~8% of the final grade.

HOMEWORK:
There will be 5 homework exercises throughout the semester. Each exercise will be worth ~3% of the final grade.

ATTENDANCE:
Attendance is required at each class meeting. Attendance is taken before the start of each class. To be late is to be absent. Students with 2 consecutive absences or 3 absences overall may be dropped from the course. Students with 2 absences in the first three weeks of class will be dropped from the course. There are no excused absences. If you are forced to miss a class due to an emergency, you are encouraged to get notes and materials you missed from a classmate and read the assignment for that day.

READING:
This course covers a broad range of topics from many fields of Earth science. It would be impossible to give fair treatment to all topics with lectures alone. Therefore, successful students must read from the textbook and other sources in preparation for class meetings. To encourage you to read before class meetings, most online quizzes will be taken from the reading materials that will be discussed in class on the due date of the online quiz. I encourage you to take notes while reading, including writing down questions that arise during reading that you would like to discuss in class. Re-reading after the class meeting has been shown to improve comprehension and success.
LITERATURE:
Books available in the UNM-Valencia library for in-library use:


Optional recommended books:


OFFICE HOURS:
While my “official” office hours are listed at the top of this syllabus, you are welcome to stop by my office at any time. My door is always open, and I am here to help you in any way that I can. If you are having trouble catching me in my office, email or phone me so that we can arrange a meeting.

PLAGIARISM AND CHEATING:
Discussion of ideas is a crucial skill in science, and I encourage you to talk with one another about the topics and assignments in this class. However, all work that you submit must be your own. If you use information from outside resources, such as the textbook, newspapers, the internet, or journals, you must cite it. Plagiarism will result in a “0” on the assignment. If you are concerned about what does or does not constitute plagiarism, I’m happy to help – just ask me after class, via email, or in office hours.

ELECTRONIC DEVICES:
Do not use cell phones during class, even for checking texts. Mute or turn off anything that can provide any distraction before class begins.

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees” by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html