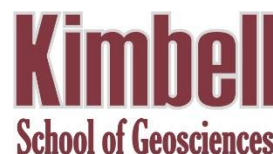


# Carbonate Depositional Systems (GEOS 5313)

McCoy College of Science, Mathematics, and Engineering  
Fall 2025



## General Course Information

- Lecture Meetings:
  - Monday | 3:00 pm – 4:20 pm | Bolin Hall 125
  - Thursday | 11:00 am – 12:20 pm | Bolin Hall 125
- Laboratory Meetings:
  - Thursday | 12:30 pm – 2:20 pm | Bolin Hall 125
- Course D2L Site: We will only use the main course site for the lecture section, there will be no content in the laboratory section site.
  - [Link to the Carbonate Depositional Systems D2L Site](#)

## Instructor Information

- Professor
  - Dr. Steven J. Rosscoe | [steven.rosscoe@msutexas.edu](mailto:steven.rosscoe@msutexas.edu) | 940.397.4448  
Office Hours: MWF 10:00 am – 11:00 am | MF 1:00 pm – 2:00 pm | Bolin Hall 101 A  
Virtual Office Hours: By Appointment | [Zoom Office Hours Link](#)

## Course Description

This course covers all aspects of marine and terrestrial carbonate depositional systems. The course will discuss the processes acting within a wide range of carbonate depositional systems (shallow marine, deep marine, lacustrine, springs, etc.) to understand the formation and characteristics of key sedimentary deposits within those systems. Lecture content is supplemented by laboratory activities involving traditional hand-sample, thin-section, and core evaluation of carbonate rocks; as well as the application of geophysical tools to effectively classify, describe, and interpret carbonate sedimentary rocks. The course has a required field component tied to the lab portion of the course and geared toward the completion of a term project.

## Course Learning Objectives

The successful completion of this course will be evaluated around the following course learning objectives. Each of these course learning objectives include aspects of both content knowledge and skills development. Students will:

1. Recognize the relationships between natural processes within depositional systems and the carbonate deposits formed in those systems.
2. Compare ancient carbonate deposits to modern carbonate deposits to interpret the depositional conditions of the ancient depositional system.
3. Develop proper laboratory and analytical techniques to study carbonate rocks and depositional systems.

4. Prepare analytical papers with appropriate and high-quality illustrations concerning significant carbonate deposits in West Texas and adjacent regions.

## Instructional Materials

The following materials are required for the successful completion of the course. In designing this course all efforts were made to keep your costs as low as possible. There is no lab manual to purchase and traditional textbooks.

### Required Textbooks

This textbook is an excellent reference, you should strongly consider purchasing a physical copy of the book if you plan on working with carbonates, sedimentary geology, or paleontology in the future.

- **James, N. P. and Jones, B. 2016.** Origin of Carbonate Sedimentary Rocks. Wiley. 446 p. ISBN 978-1-118-65273-2

### Required Software Applications

- Microsoft Office: Word, PowerPoint [Free Access to Microsoft Office 365](#)
  - Required for completion of laboratory activities.
- PDF Reader
  - PDFs are used to provide some course materials; a browser PDF reader or Adobe Acrobat will be necessary to view them.

### Recommended Textbooks (Not Required)

If you are relatively new to geosciences and require some background material, I highly recommend using one of the following books that goes over sedimentary rocks and stratigraphy in detail. These books would classically be used in an undergraduate sedimentation and stratigraphy course.

- **Prothero, D. R. and Schwab, F.** Sedimentary Geology: An Introduction to Sedimentary Rocks and Stratigraphy. Freeman Press (Any Edition)
- **Boggs, S.** Principles of Sedimentology and Stratigraphy. Prentice Hall (Any Edition)

### Supplemental Readings

These readings are provided as PDFs in D2L, specifically to prepare you as pre-lab readings for some of the laboratory activities you will be completing in this course.

- Other readings as necessary.

## Grading Information

The formal grade for this course is determined by your performance on lecture exams, a laboratory examination, laboratory activities, and the course project. Laboratory activities are often collaborative, but your laboratory exam will be individual. Lecture exams and the course project are individual assignments. Your grade is calculated by dividing the points you earned during the semester by completing assignments by the total number of points possible in the semester. The letter grade for the course follows the traditional university style.

**Table 1: Allocation of Points by Assignment Type**

The table below shows the total number of points for each major category of assignment that are possible this semester. For more details about the assignments see the section for that assignment in this portion of the syllabus.

Assignments (Quantity)	Points
Lecture Examinations (3)	300
Laboratory Examination (1)	060
Lab Activities (12)	240
Course Project (1)	100
Total Points	700

**Table 2: Points, Percentage, and Letter Grade Values**

The table on the following page shows the point-value and percentage-value required to reach a particular letter grade in the course. The table reflects the optimal running of the course where there are no missed days or activities. The instructor reserves the right to change the point distributions to reflect such changes. The percentage requirements will remain unchanged throughout the semester. Percentage grades are rounded to the nearest whole percent.

Grade	Points	Percentage
A	630 and up	90% and up
B	560 to 629	80% to 89%
C	490 to 559	70% to 79%
D	420 to 489	60% to 69%
F	Less than 420	59% or less

**Lecture Examination Information**

During the semester there will be three examinations covering our three major units in the course. The units are Introduction to Carbonates (Weeks 1-4), Carbonate Depositional Systems (Weeks 5-9), and Important Concepts in Carbonates (Weeks 10-15). Each examination is worth 100 points. Examinations will be released the day we finish the lecture material for that unit and will be due by their scheduled due date on the course schedule (last page of this syllabus), typically a week or more is provided, except for examination 3 (must be submitted on the final exam date). Examinations are a mix of short answer and essay style questions. Short answer questions are typically worth five to ten points each and require complete grammatically correct sentences. Essays are typically worth twenty points and require multiple paragraphs and a structured response. These examinations will be submitted through D2L as online quizzes.

These examinations are individual assignment, they are not group activities. Examinations are open notes (this includes course notes, the textbook, and peer-reviewed scientific papers). You may not use websites, other humans, or AI to write your answers to these questions. Use of websites, other humans, and/or AI in answering examination questions will result in a grade of zero on the examination.

### **Laboratory Examination**

At our last laboratory meeting of the semester, we will have an examination testing your individual abilities to identify, describe, evaluate, and interpret carbonate rocks. This examination will be specimen-based and take the typical two-hour duration of the laboratory period. This examination must be completed during the lab period, in the lab classroom. It is worth 60 points. You may use course notes, textbooks, any scientific papers provided in the course, and your lab activity sheets when you take the lab final exam. While the lab activities were completed as group assignments, the laboratory examination is a solo endeavor.

### **Laboratory Activities**

There are twelve laboratory activities for the graduate carbonates course. The lab activities start by focusing on distinct attributes of carbonate rocks (both in hand sample and in thin section). The later labs in the course take those descriptive and classification skills and apply them to different aspects of evaluating carbonate rock successions. Labs are completed in groups of four students. Each group will submit a final activity sheet by the scheduled due date for the lab (see due dates list on last page of syllabus). Each student should fill out their own lab activity sheet, a fifth sheet will be provided for submission of the final group lab to the instructor. The student who completes the lab sheet for submission each week should rotate throughout the group (ex: four students, twelve labs, each student should lead three times). Paper copies of the lab are submitted. When the group lab sheet is graded and returned all students should correct their individual lab sheets, for study and for use during the laboratory final exam.

### **Course Project**

The project for the carbonates course requires full participation in a field trip to Jingo, Kansas where we will study several major cyclothem successions of rocks (Note: the field trip will be run in conjunction with the undergraduate Paleogeology course). These successions record the rise and fall of sea level in the midcontinent sea. The carbonates class will compare each distinctive limestone in these sequences to each other and evaluate their characteristics in stratigraphic order and in relation to the sea-level curve for these cyclothems. The culmination of the project will be a written paper with a brief introduction, formal systematic descriptions of each of the carbonate rock units, and a discussion of the relationships between the rock characteristics, stratal order and sea level. More details will be provided later in the semester, including a rubric for how the final paper will be graded.

### **Extra Credit**

There are no extra credit assignments in this course. While the instructor may offer bonus points for attendance to certain events and activities within the department, you should focus on performing well on the assignments in the course to earn your grade.

### **Late Work Policy**

This is an online course where each assignment has a week or more of lead time before their due date. **\*No late work will be accepted.** Missed labs and examinations may be made up with a legal, paper-documented, excuse.

### **Make-Up Work/Tests**

For legal, paper-documented excuses make-ups for labs and examinations can be completed. Make-up work should be arranged for in advance wherever possible. The instructor will give you a new deadline that is reasonable for the course timeline. **\*No make-up work (lecture or lab) will be allowed beyond 10 days past the original deadline.**

The group project cannot be made-up as it requires active participation in the group throughout the semester. While your group should work with your schedule to include you and reschedule meetings due to illness, if you do not participate at all you will not be able to make-up the assignment.

Note: You must complete the assignments, laboratories, and examinations presented in this syllabus. **\*No substitute assignments will be allowed to compensate for poor performance or missed deadlines.**

### **Instructor Classroom Policies**

The following policies are the policies that are integral for our successful completion of the course and should be read thoroughly. If you have any questions, please see the instructor.

#### **Academic Honesty Policy**

Academic dishonesty is considered cheating, collusion, and plagiarism. Any unauthorized assistance during the completion of assignments, using on aids beyond those authorized for an assignment, or the use of other people or services to complete assignments is considered cheating. Working with others in a way that is not authorized by the instructor to complete assignments is considered to be collusion. Plagiarism is the use of another person's materials (by paraphrase or direct quotation) without giving them full and clear acknowledgement. The use of material prepared by another person or agency selling term papers and academic materials is also considered plagiarism.

The use of any artificial intelligence (AI) in completing course assignments is NOT allowed. AI in this sense is any technology that summarizes, writes, or answers questions on its own. Recent court rulings have allowed lawsuits to go forward against Chat GPT and other AI operators because it directly plagiarizes the use of others. College is about you learning to write, you developing your voice, and you learning how to process, summarize, and properly cite information. Any use of AI is considered a violation of this academic honesty policy.

If a student is caught cheating, colluding, or plagiarizing on any assignment the assignment grade will automatically be a zero. Two or more violations will result in failure of the course.

#### **Classroom Civility Policy**

Learning, especially in science, can be a very challenging process. Learning often requires putting yourself out there and being vulnerable. Science also happens to be at the forefront of information which may conflict with personal beliefs. Your beliefs are yours and nothing will change that, though those beliefs may not get you credit on the exam. We are focused on science

and what understandings have been developed in the field. Additionally, no scientist thinks the same way as every other scientist. To develop the best understandings of our universe, we must seek input from all people in the field.

In my classroom, we strive to create an environment where everyone is respected and valued for who they are. We are all here together, learning together, and working toward the same goal. This is not a place for hate of any kind. The use of derogatory language, hate speech, or violence is absolutely unacceptable in this classroom and in any setting related to the course. Learn to work with and value all people. Be civil and treat each other with respect. Do your best to listen to each other, in any conversation. Use of derogatory language, hate speech, or violence will result in removal to the classroom or the course.

Dr. Rosscoe is available to help if you have any concerns or questions about building a positive classroom environment. The campus also has numerous resources related to a safe and welcoming experience at MSU. Also, don't forget the MSU Safety App.

- [Title IX Misconduct](#): Dating violence, sexual assault, sexual harassment, stalking, and other forms of sexual misconduct.
- [Bias Incident Reporting](#): Bias and hate incidents related to race, gender, or sexual identity.
- [Disability Grievance Procedures](#): Discrimination on the basis of disability.

### **COVID-19 and Illnesses Policy**

Since COVID-19, classroom health has been a necessary and probably long overdue focus. While there are no longer COVID-19 policies in place by the university the following procedures are scientific best practices. These same principles can be applied to any viral infection (flu, cold, etc.).

- If you become ill and have symptoms, get tested.
- If you are positive for COVID-19, stay home. It's good for your recovery and good for protecting your peers.
- Illness happens and if you absolutely must be in public, wear a mask. Even a cloth mask reduces the chance you will spread the illness to others.
- If you stay home or miss assignments, be sure to get a doctor's note and excuse. It allows the instructor to help you make things up.

In the case of long-term illnesses or medical situations that will prevent you from attending classes regularly, contact the professor as soon as possible. We will work together to make sure that you can succeed, just make sure it is Doctor-documented. I can't do much to help, if I don't know until the day before the semester ends.

### **Electronic Devices Policy**

Use of electronic devices for taking notes is allowed in my classroom. Recording (audio or video) is not allowed unless approved by the instructor for educational purposes. The use of social media or streaming anything is not an appropriate use of technology during class. If your use of technology is non-educational or is being disruptive to your peers, you will be asked to leave. If

you're in the back of the room, ear buds in, and smiling as you watch something on your device, I do notice. Don't be that person.

### **Course Grades and Grade Bumps Policy**

In my courses, a grade is earned by accumulating points throughout the semester. The grade you earn in the course is determined by the number of points you earn through the timely completion of assignments. As such, at the end of the semester, there are no grade bumps given out. Do not ask how or if you can be bumped up to the next letter grade, if you haven't earned the points, you will not be able to get that grade.

If you believe there to be an error in the calculation of your grade, whether it is on a specific assignment or the whole course feel free to ask me to re-evaluate and double check. I will do so happily. For specific assignments, be prepared to give me specific reasons you feel the grade is wrong (which wrong answer do you think was right, etc.).

### **Desire-to-Learn (D2L)**

Extensive use of the MSU D2L learning management system is required in this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

### **Computer Requirements**

Taking this course involves the completion of all lecture exams, reading quizzes, and discussions in the course learning management system (D2L). This class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. **\*Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered a reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.** Computers are available on campus in various areas of the buildings as well as the Academic Success Center. **\*Your computer being down is not an excuse for missing a deadline!!** There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help, log into D2L.

### **Inclement Weather Policy**

In cases of extreme weather events that delay or close campus and where those delays or closures impact the course:

- If the closure or delay includes lecture meeting time, the lecture will not meet and the lecture schedule for the semester will be modified.

- If the closure or delay includes a laboratory meeting time, the laboratory will not meet and all remaining laboratory meetings for the week will be cancelled to keep the lab sections on the same schedule. Lab due dates and lab quiz dates will be adjusted.
- If due dates are impacted by the delay or closure, they will be rescheduled.
- All changes to the course schedule will be posted, in writing, in D2L.

NOTE: Because all students do not have equal or reliable access to technology and internet, especially in times of inclement weather, we WILL NOT shift to online in cases of inclement weather.

## **University Policies and Information**

The following information and policies apply to this course. Please read each of these policies and ask your instructor if you have any questions.

### **Important Dates**

- First Day of Classes: August 25<sup>th</sup>, 2025
- Change of Schedule and Late Registration: August 25<sup>th</sup>-28<sup>th</sup>, 2025
- Labor Day University Holiday: September 1<sup>st</sup>, 2025
- Last Day to File for December Graduation: October 6<sup>th</sup>, 2025
- Priority Deadline to File for May Graduation: October 8<sup>th</sup>, 2025
- Last Day for “W” (Drops after this date receive “F”: November 24<sup>th</sup>, 2025
- Thanksgiving Holiday: November 26<sup>th</sup> to 28<sup>th</sup>, 2025
- Last Day of Classes: December 5<sup>th</sup>, 2025
- Final Examinations: December 6<sup>th</sup> to 11<sup>th</sup>, 2025
- Graduate Commencement: December 12<sup>th</sup>, 2025
- Undergraduate Commencement: December 13<sup>th</sup>, 2025

### **Attendance**

Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

### **Change of Schedule**

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100%



refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

### **Refund and Repayment Policy**

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exist in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

### **Services for Students with Disabilities**

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to [Disability Support Services](#).

### **Campus Carry Rules/Policies**

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit [Campus Carry Rules and Policies](#).

### **Active Shooter**

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit [Safety / Emergency Procedures](#).

**Smoking and Tobacco Policy**

College policy strictly prohibits the use of tobacco products in any building owned or operated by MSU. Adult students may smoke only in the outside designated-smoking areas at each location

**Alcohol and Drug Policy**

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

**Grade Appeal Process**

Following the appropriate procedure for grade appeals requires you to speak to your instructor first, so talk to your instructor. Students who wish to appeal a grade should consult the Midwestern State University [Undergraduate Catalog](#).

## Lecture Topic Schedule

The following is the schedule for the lecture topics we will study during the semester. This schedule will vary over the semester as some topics may move quicker or slower than expected. The recommended text has topics that align very nicely with each topic in the lectures. **\*Note: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Week	Dates	Monday Topic	Thursday Topic
1	Aug 25 to Aug 29	Introduction/Review <i>James &amp; Jones, Chapter 1</i>	Carbonate Chemistry <i>James &amp; Jones, Chapter 2</i>
2	Sep 01 to Sep 05	<b>No Class</b> <i>Labor Day Holiday</i>	The Carbonate Factory <i>James &amp; Jones, Chapter 3</i>
3	Sep 08 to Sep 12	Marine Carbonate Factories <i>James &amp; Jones, Chapter 4</i>	Microbes and Algae <i>James &amp; Jones, Chapter 5</i>
4	Sep 15 to Sep 19	Single Cells and Shells <i>James &amp; Jones, Chapter 6</i>	Echinoderms and Colonial Invertebrates <i>James &amp; Jones, Chapter 7</i>
5	Sep 22 to Sep 26	Lacustrine Carbonates <i>James &amp; Jones, Chapter 8</i>	Carbonate Springs <i>James &amp; Jones, Chapter 9</i>
6	Sep 29 to Oct 03	Warm-Water Neritic Carbonates <i>James &amp; Jones, Chapter 10</i>	Cool-Water Neritic Carbonates <i>James &amp; Jones, Chapter 11</i>
7	Oct 06 to Oct 10	Muddy Peritidal Carbonates <i>James &amp; Jones, Chapter 12</i>	Carbonate Tidal Sands <i>James &amp; Jones, Chapter 13</i>
8	Oct 13 to Oct 17	Modern Reefs <i>James &amp; Jones, Chapter 14</i>	Ancient Reefs <i>James &amp; Jones, Chapter 15</i>
9	Oct 20 to Oct 24	Carbonate Slopes (Video) <i>James &amp; Jones, Chapter 16</i>	Deepwater Carbonates (Video) <i>James &amp; Jones, Chapter 17</i>
10	Oct 27 to Oct 31	Precambrian Carbonates <i>James &amp; Jones, Chapter 18</i>	Carbonates Over Time <i>James &amp; Jones, Chapter 20</i>
11	Nov 03 to Nov 07	Carbonate Diagenesis <i>James &amp; Jones, Chapter 24-27</i>	Carbonate Diagenesis <i>James &amp; Jones, Chapter 24-27</i>
12	Nov 10 to Nov 14	Carbonate Diagenesis <i>James &amp; Jones, Chapter 24-27</i>	Sequence Stratigraphy Basics <i>No Readings</i>
13	Nov 17 to Nov 21	Sequence Stratigraphy Basics <i>No Readings</i>	Carbonate Sequence Stratigraphy <i>James &amp; Jones, Chapter 19</i>
14	Nov 24 to Nov 28	Dolomitization <i>James &amp; Jones, Chapters 28-30</i>	<b>No Class</b> <i>Thanksgiving Holiday</i>
15	Dec 01 to Dec 05	Dolomitization <i>James &amp; Jones, Chapters 28-30</i>	The Joy of Carbonates <i>No Reading</i>

### Additional Information

- I will be attending a conference October 18-22, 2025. Lectures will be video lectures on D2L.
- The final exam block is Wednesday, December 10, 2025, from 3:30 pm to 5:30 pm. The exam is online, in person attendance is not required. I will be available in my office at that time.
- The tentative dates for the class field trip, in conjunction with the paleoecology class, is October 3<sup>rd</sup> – October 5<sup>th</sup>, 2025. This trip will be a full day on a massive outcropping of Pennsylvanian rocks in eastern Kansas.

## Laboratory Activity Schedule

The following is a table of all laboratory activities required for the course. All laboratory activities are due by 4:00 pm on the Wednesday following the lab meeting. Readings and resources are provided in italics below the lab activity name. Readings may be provided as PDFs in D2L or as handouts in the lab. **\*NOTE: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Week	Date	Lab Activity
1	Aug 28	No Lab Meetings <i>First Week of Classes</i>
2	Sep 04	Lab 1 – Carbonate Minerals <i>James and Jones, Chapter 2; Lerman &amp; Mackenzie (2016) [PDF]</i>
3	Sep 11	Lab 2 – Carbonate Sediments and Allochems <i>Imbry &amp; Purdy (1962) [PDF]</i>
4	Sep 18	Lab 3 – Carbonate Cements <i>Scholle (1978) [PDF]</i>
5	Sep 25	Lab 4 – Carbonate Porosity <i>James &amp; Jones, Chapter 32</i>
6	Oct 02	Lab 5 – Carbonate Diagenetic Features <i>Scholle &amp; Scholle, Ch. 22-26 (2003) [PDF]</i>
7	Oct 09	Lab 6 – Folk Classification of Carbonate Rocks <i>Folk (1962) [PDF]</i>
8	Oct 16	Lab 7 – Dunham Classification of Carbonate Rocks <i>Dunham (1962) [PDF]</i>
9	Oct 23	Lab 8 – Carbonate Geochemistry <i>No Readings</i>
10	Oct 30	Lab 9 – Systematic Descriptions of Carbonate Rocks <i>No Readings</i>
11	Nov 06	Lab 10 – Carbonates in Core I <i>Handouts</i>
12	Nov 13	Lab 11 – Carbonates in Core II <i>Handouts</i>
13	Nov 20	Lab 12 – Carbonate in the Subsurface <i>Handouts</i>
14	Nov 27	No Lab Meetings <i>Thanksgiving Holiday</i>
15	Dec 04	Laboratory Examination <i>No Readings – Bring All Lab Resources</i>

### Course Due Dates in Chronological Order

The following table lists the due dates of each assignment in the course. All items are due at 11:59 pm on the date for which they are due (except for group meetings with instructor which must be completed during weekday availability hours). **\*NOTE: Changes in the course syllabus, procedures, assignments, and schedule may be made at the discretion of the instructor.**

Due Date	Assignment
Wednesday, September 10 <sup>th</sup> , 2025	Lab 1 – Carbonate Minerals
Wednesday, September 17 <sup>th</sup> , 2025	Lab 2 – Carbonate Sediments and Allochems
Wednesday, September 24 <sup>th</sup> , 2025	Lab 3 – Carbonate Cements
Monday, September 29 <sup>th</sup> , 2025	Introduction to Carbonates Examination
Wednesday, October 1 <sup>st</sup> , 2025	Lab 4 – Carbonate Porosity
Wednesday, October 8 <sup>th</sup> , 2025	Lab 5 – Carbonate Diagenetic Features
Wednesday, October 15 <sup>th</sup> , 2025	Lab 6 – Folk Classification of Carbonate Rocks
Wednesday, October 22 <sup>nd</sup> , 2025	Lab 7 – Dunham Classification of Carbonate Rocks
Wednesday, October 29 <sup>th</sup> , 2025	Lab 8 – Carbonate Geochemistry
Monday, November 3 <sup>rd</sup> , 2025	Carbonate Depositional Systems Examination
Wednesday, November 5 <sup>th</sup> , 2025	Lab 9 – Systematic Descriptions of Carbonate Rocks
Wednesday, November 12 <sup>th</sup> , 2025	Lab 10 – Carbonates in Core I
Wednesday, November 19 <sup>th</sup> , 2025	Lab 11 – Carbonates in Core II
Tuesday, November 25 <sup>th</sup> , 2025	Course Project
Thursday, December 4 <sup>th</sup> , 2025	Lab 12 – Carbonates in the Subsurface Laboratory Examination
Wednesday, December 10 <sup>th</sup> , 2025	Important Concepts in Carbonate Rocks Examination

### Official End Date of the Course

The last day of this course is Wednesday, December 10<sup>th</sup>, 2025. Following that date grades will be calculated and reported. Any work that is not submitted by 11:59 pm on December 10<sup>th</sup>, 2025 will receive a grade of zero. No work will be accepted after December 10<sup>th</sup>, 2025 at 11:59 pm.