

Sedimentology

Course CO10-210203, Fall 2018
Lecture 1a: Course Introduction

Vikram Unnithan & Erica Luzzi

v.unnithan@jacobs-university.de & e.luzzi@jacobs-university.de

Research III, Room 98

Course Website:

<https://teamwork.jacobs-university.de/display/SED/Sedimentology+Home>



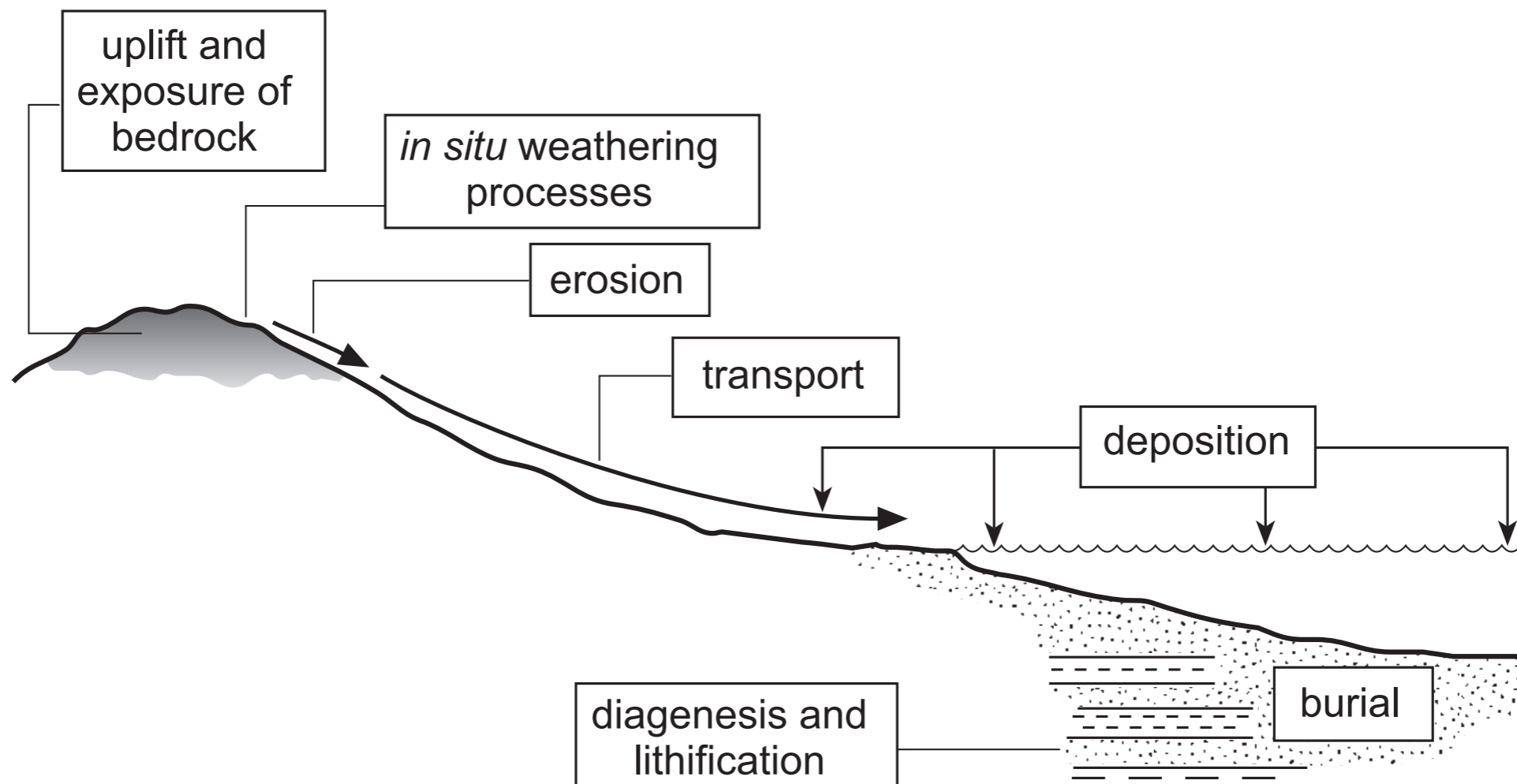
Course Goals

- Sedimentology
 - Overview - from features to processes
 - Siliciclastic and Carbonates
 - Provide basic sedimentary geology tools & terminology
 - Introduction to process-oriented geology

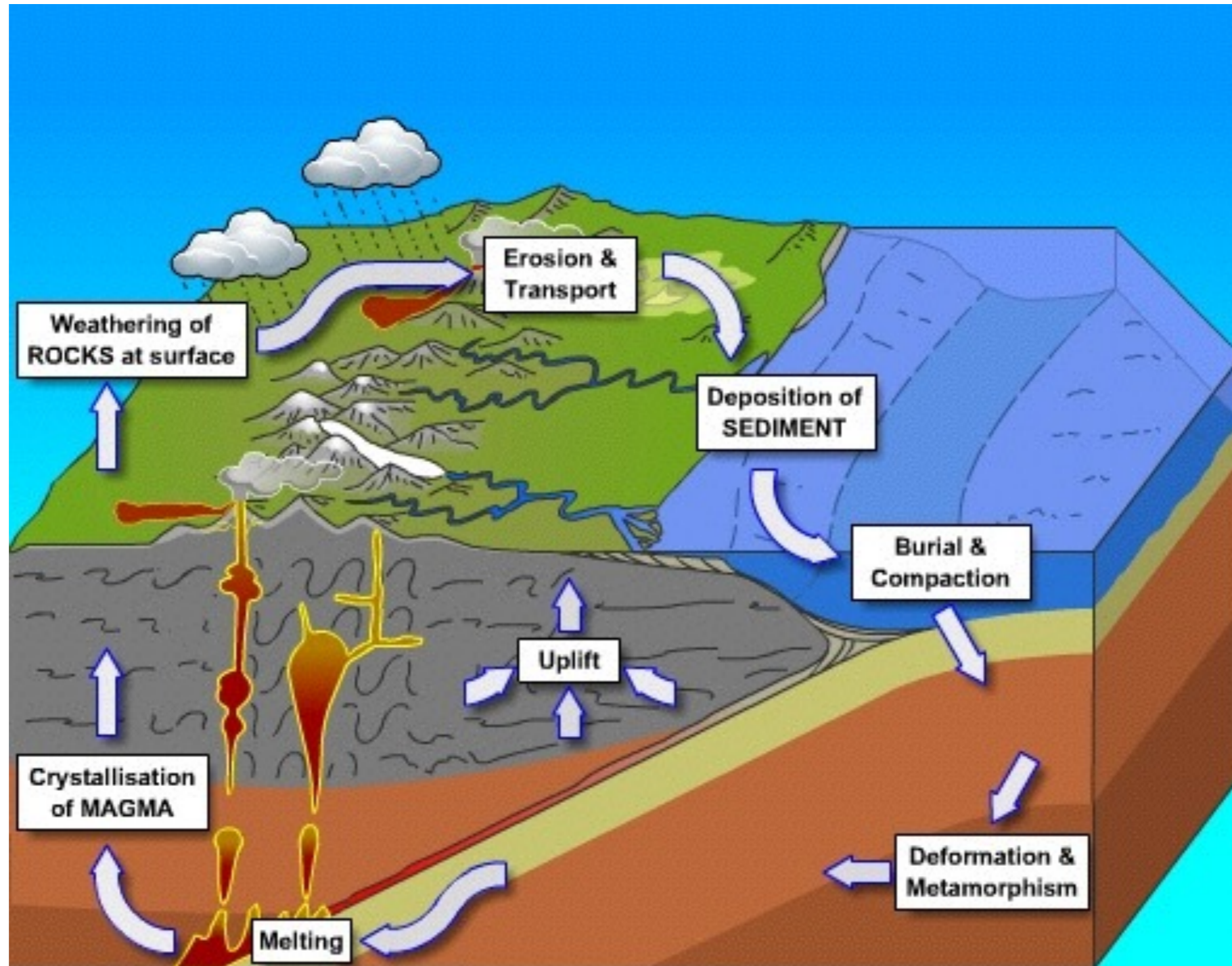


Topics and how ...

- Introduction and revision, Earth History, Stratigraphy, sediment types and weathering
- Transport, deposition, diagenesis
- Sedimentary structures and features
- Sedimentary environments (clastic: fluvial, deltaic, deep-sea; and carbonates)



Processes



Schedule

| # | Date | From | To | Room | Topic | Slides, Readings, Assignments | Comments |
|------------|----------------------------------------|-----------------------|-----------------------|------------------------|------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------|
| 1 | Fri, 26. Oct. 2018 | 09:45 | 11:00 | R3, Seminar Room | Sedimentology Intro & Earth History 1 | | |
| 2 | Tue, 30. Oct. 2018 | 11:15 | 12:30 | R3, Seminar Room | Earth History 1 & 2 Sedimentology Clastics | Lecture 1a & 2a, Chapter 1, 2, 4 | |
| 3 | Fri, 2. Nov. 2018 | 09:45 | 11:00 | R3, Seminar Room | Rock identification 1: Clastics | Lecture 2a & 2b, Chapter 1, 2, 4 | |
| 4 | Tue, 6. Nov. 2018 | 11:15 | 12:30 | R3, Seminar Room | Stratigraphy | Lecture 3, Chapter Chapters 19, 22(pages 339-340) & 23 (pages 340-356) | |
| 5 | Fri, 9. Nov. 2018 | 09:45 | 11:00 | R3, Seminar Room | Rock identification 2: Clastics | | |
| 6 | Tue, 13. Nov. 2018 | 11:15 | 12:30 | R3, Seminar Room | Sedimentology | | |
| 7 | Fri, 16. Nov. 2018 | 09:45 | 11:00 | R3, Seminar Room | Rock identification 3: Clastics | | |
| 8 | Tue, 20. Nov. 2018 | 11:15 | 12:30 | R3, Seminar Room | NO CLASS | | NO CLASS |
| 9 | Fri, 23. Nov. 2018 | 09:45 | 11:00 | R3, Seminar Room | Sedimentology: Carbonates | | Maybe NO CLASS |
| 10 | Tue, 27. Nov. 2018 | 11:15 | 12:30 | R3, Seminar Room | Sedimentology: Carbonates | Chapters 7 - 14 and 16 | |
| 11 | Fri, 30. Nov. 2018 | 09:45 | 11:00 | R3, Seminar Room | Clastics / Environments | See Lecture 4 (below) | |
| 12 | Tue, 4. Dec. 2018 | 11:15 | 12:30 | R3, Seminar Room | Clastics / Environments | Homework 2a | |
| 13 | Fri, 7. Dec. 2018 | 09:45 | 11:00 | R3, Seminar Room | Open sessions / Rock Identification Catch up session | See Lectures (below) | |
| EXTRA 1 | Tuesday 27th | 12:30 | 13:30 | | | | |
| EXTRA 2 | Tuesday 4th | 12:30 | 13:30 | | | | |
| | ??? | ?? | ?? | ?? | FINAL EXAM | Useful for Revision - | Registrar's Schedule |



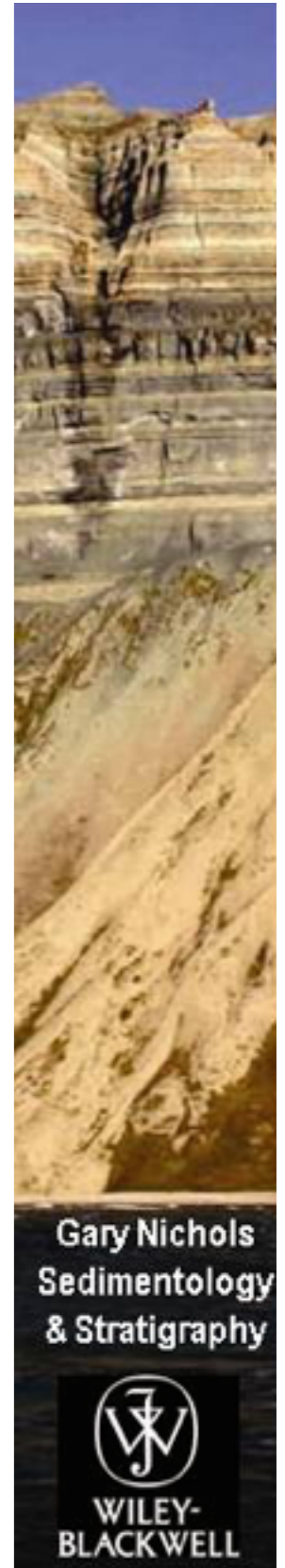
Grading & Assignments

- 10% Participation
- 45% Final Exam
- 45% Assignments
 - Submission Due: 13:00, Friday 14th December 2018
 - Printed/paper (Erica, or R3 Team assistant or me) + digital submission (minimum an email addressed to me confirming paper submission)
 - Late Submissions
 - up to 1 week after deadline -50%
 - 1 week after deadline -100%



Literature

- Sedimentology and Stratigraphy, 2nd Edition. G. Nichols. Wiley-Blackwell (2009). ISBN: 978-1-4051-3592-4
- <http://jacob.eblib.com/patron/FullRecord.aspx?p=428124>



.. and many more



Website

- Campusnet
- Faculty webpages - placeholder -
- Teamwork - <https://teamwork.jacobs-university.de/display/SED/Sedimentology+Home>



Links .. videos .. revision ..

- Sedimentary Rocks - <http://www.youtube.com/watch?v=82qk-UV3djs>
- Prezi Presentation on Sedimentary Rocks - http://prezi.com/g3maymbfnx_y/sedimentary-rock/
- Rock Cycle - <http://www.youtube.com/watch?v=y4FAGuexGIM>
- Weathering - <http://www.youtube.com/watch?v=UJ7JM2RTOYc>
 - - Chemical - <http://www.youtube.com/watch?v=o1AU539eU5c>
 - - Mechanical - <http://www.youtube.com/watch?v=CCESK98ykJ4>
- Clastic Rocks - <http://www.youtube.com/watch?v=bwx3IXU6EBk>
- Chemical and Organic Rocks - <http://www.youtube.com/watch?v=Uph7yCNp2dw>
- Sedimentary Structures - <http://www.youtube.com/watch?v=21q0FBQ6Q7I>
- Sedimentary Environments - http://www.youtube.com/watch?v=xJ9TgTz_G2w

