

308 Boardman Hall Orono, Maine 04469-5711 Tel: 207.581.1277 Fax: 207.581.3888

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## Students Accessibility Services

If you have a disability for which you may be requesting an accommodation, please contact Student Accessibility Services, 121 East Annex, 581.2319, as early as possible in the term. **Students who have already been approved for accommodations by SAS and have a current accommodation letter should meet with me privately as soon as possible.** 

# Sexual violence policy

The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination involving members of the campus, your teacher is required to report this information to Title IX Student Services or the Office of Equal Opportunity. If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources: For confidential resources on campus: Counseling Center: 207-581-1392 or Cutler Health Center: at 207-581-4000. For confidential resources off campus: Rape Response Services: 1-800-871-7741 or Partners for Peace: 1-800-863-9909. Other resources: The resources listed below can offer support but may have to report the incident to others who can help: For support services on campus: Title IX Student Services: 207-581-1406, Office of Community Standards: 207-581-1409, University of Maine Police: 207-581-4040 or 911. Or see the Title IX Student Services website for a complete list of services.

### Course schedule disclaimer

In the event of an extended disruption of normal classroom activities (due to COVID-19 or other long-term disruptions), the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

#### Tentative schedule

Day	Date	Topic	Lab
W F	1/18/2023 1/20/2023	Syllabus, Introduction, soil origins, site investigation No class, video lecture: Phase relationships	Soil components
M W F	1/23/2023 1/25/2023 1/27/2023	Grain size distribution Atterberg limits and soil mineralogy Soil classification	Grain size distribution
M W F	1/30/2023 2/1/2023 2/3/2023	Compaction Water in soils: Frost action on soils Water in soils: Capillarity and pore pressure	Atterberg limits
M W F	2/6/2023 2/8/2023 2/10/2023	Water in soils: Total and effective stress Water in soils: Total and effective stress (cont.) Water in soils: Total head, pressure head, and hydraulic gradient	Visual classif.
M W F	$ \begin{array}{ c c c c c }\hline 2/13/2023 \\ 2/15/2023 \\ 2/17/2023 \\\hline \end{array}$	Water in soils: Darcy's law, 1D seepage Water in soils: Permeability Water in soils: Permeability	Compaction

# Department of Civil and Environmental Engineering



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Day	Date	Topic	Lab
M W F	2/20/2023 2/22/2023 2/24/2023	No class: President's day Water in soils: 2D seepage, finite difference solution * Water in soils: Flow nets, flow in a section, pore pressure	In-situ density
M W F	2/27/2023 3/1/2023 3/3/2023	Water in soils: Flow nets, flow in a section, pore pressure ** Water in soils: Uplift pressure Water in soils: Internal erosion	Permeability
M W F	3/6/2023 3/8/2023 3/10/2023	Externally generated stress: Elastic solution to point load Externally generated stress: Use of charts, num solutions, and superpossition Consolidation: 1D compression of fine grained soils	Site investigation
M W F	3/13/2023 3/15/2023 3/17/2023	No class: Spring break No class: Spring break No class: Spring break	
M W F	3/20/2023 3/22/2023 3/24/2023	Consolidation: Calculation of primary consolidation settlement Consolidation: Rate of consolidation Consolidation: Calculation of time-dependent consolidation	Bonus
M W F	3/27/2023 3/29/2023 3/31/2023	No class, video lecture: Consolidation: Applications No class, video lecture: Soil strength: 2D State of stress and principal stresses Soil strength: 2D State of stress and principal stresses	Consolid.
M W F	4/3/2023 4/5/2023 4/7/2023	Soil strength: Stresses at any orientation plane and Mohr's circle Soil strength: Invariant stresses Soil strength: Solved samples of Mohr-circle problems using graphical solutions	Settlement estimates
M W F	4/10/2023 4/12/2023 4/14/2023	Soil strength: Dilation of soils Soil strength: Strength of coarse grained soils Soil strength: Strength of fine grained soils	Unconf. compression test
M W F	4/17/2023   4/19/2023   4/21/2023	Soil strength: Mohr-Coulomb failure criteria Soil strength: Sample calculation of PSR, friction angles, cohesion, Su Soil strength: Lateral earth pressure coefficients.	Direct shear
M W F	4/24/2023 4/26/2023 4/28/2023	Soil strength: Sample calculation of active and passive earth pressure No class: Maine's day Soil strength: Applications	Direct shear
M W F	5/1/2023 5/3/2023 5/5/2023	Exams begin * Final exam due date ** Semester ends	

M: Monday - E: Wednesday - F: Friday

No class: Video lecture

No class

Exam due

\* Exam assignment date

\*\* Exam due date