UNIVERSITY OF
ALASKA
FAIR

5. **Course goals.**

   We will explore the study of earthquakes and Earth's interior structure using seismological theories and algorithms. The underlying physical phenomenon we will examine is the seismic wavefield: the time-dependent, space-dependent elastic waves that originate at an earthquake source (for example, a fault slips) and propagate though the heterogeneous Earth structure, then are finally recorded as

8. **Course calendar (tentative).**

Day	Date	Topic	Reading Due†	Homework

9. **Course policies.**

(a) **Attendance**: All students are expected to attend and participate in all classes.

(b) **Tardiness**: Students are expected to arrive in class prior to the start of each class. If a student does arrive late, they are expected to do so quietly and inform the instructor without disturbing the class.

(c) **Participation and Preparation**: Students are expected to come to class with assigned reading and other assignments completed as noted in the syllabus.

(d) **Assignments**:

i. All assignments are due at the start of class on the due date noted in the Syllabus.

ii. Late assignments will be accepted with a 20% penalty per day late; an assignment that is ≥ 5 days late will receive a zero.

iii. The lowest homework assignment will be dropped when computing the course grade.

Homework Tips: Please type or write neatly, keep the solutions in the order assigned and staple pages together. Include only relevant computer output in your solutions (a good approach is to cut and paste the relevant output for each problem into an editor such as MS Word or Latex). Also clearly circle or highlight important numbers in the output, and label them with the question number. I also suggest that you to include your Matlab code in your answers, both so that you can refer back to it for future assignments and so that I can identify where a mistake may have occurred. Display numerical answers with a reasonable number of significant figures and with *units* if the quantity is not dimensionless.

Homework scores are based on clarity of work, logical progression toward the solution, completeness of interpretation and summaries, and whether a correct solution was obtained. I encourage you to discuss homework problems with other students, however the work you turn in must be your own.

(e) **Graded Assignments**: Assignments will be graded for students within seven days of their receipt in class, except during exam weeks when they will be returned at the end of the nex8419(t)2.578(d)0(4)0.931213(t)2.56084(h)003.21024(s)-3.48715(s)-3.489

(c) Overall course grades are based on the following criteria:

A	$x \geq 93$	excellent performance:
A–	$90 \leq x < 93$	student demonstrates deep understanding of the subject
B+	$87 \leq x < 90$	strong performance:
B	$83 \leq x < 87$	student demonstrates strong understanding of the subject,
B–	$80 \leq x < 83$	but the work lacks the depth and quality needed for an 'A'
C+	$77 \leq x < 80$	average performance:
C	$73 \leq x < 77$	student comprehends the essential material
C–	$70 \leq x < 73$	as reflected by the average quality of assignments
D	$60 \leq x < 70$	below average performance:
		student demonstrates comprehension of some concepts
F	$x < 60$	Failure to complete work with 60% quality

(d) **Final Project.** The final project will constitute 30% of the course grade. The project will involve independent research into one aspect of seismology. It will require some computation and will be presentede fo.r Sam Franciscoa, CA: Q86(S)A6.48664(e)-1.66393(p)-23.175(o)-5.8887(r)-6.48664(t)2.56084

cience Books, 2 ed., 2002. 2009 corrected pri ng.

E. Malvern, *Intoducton t te Mechan8sf a Contnuous Medium* . Upper Saddle River, ew Jersey, USA: Pren e-Hall, 1969.

. Nissen-Meyer, A. Fournier, and F. A. Dahlen, "A two-dimensional spectral-element method