

# **Syllabus GEOV276 THEORETICAL SEISMOLOGY**

## **From Auld's textbook**

Chapter 1. Particle displacement and strain: 1-32

Chapter 2. Stress and the dynamical equations: 33-55

Chapter 3. Elastic properties of solids: 1-99

Chapter 6. Acoustic plane waves in isotropic solids: 163-171

Chapter 7. Acoustic plane waves in anisotropic solids: 210-236

Chapter 8. Reflection and refraction: 1-11, 21-30

## **From Pujol's textbook**

Chapter 8. Ray theory: 234-263

## **From other sources**

Krebes, 2004. Seismic forward modelling, CSEG Recorder.

Lecture notes on surface waves, seismic attenuation and Green's functions.

## **References**

Auld, B.A., 1990. Acoustic fields and waves in solids. Krieger Publishing Company, Malabar, Florida. Volumes 1 and 2.

Pujol, J., 2003. Elastic wave propagation and generation in seismology. Cambridge University Press.

