GG102 “Introduction to Global Change” Syllabus
Fall Semester, 2014
T-Th 12:00-1:15 p.m.  Classroom: POST 723  CRN 77530  3 credits (DP)

Professor: A. Hope Jahren (jahren@hawaii.edu), office hours starting at 1:15 p.m.,
directly after class.

Course Description: How is our World Changing? Our planet is currently home to more
than 7,000,000,000 (seven billion) people. At a minimum, each of these people needs
food, water and shelter. In addition, people need to use resources in order to develop and
express themselves. How many resources are currently being used, and which types?
How is this resource use affecting the other animals and plants that inhabit our planet?
How is this resource use affecting the non-living portions of our Earth? We will pay
special attention to the changes that have taken place in the last 50 years, and the data that
demonstrates these changes. Each lecture will be accompanied by a discussion of the
particular ways that each topic affects the state of Hawaii.

Topics include: Energy (pertroleum, natural gas, biofuels, wind, solar and
hydropower); Transportation (automobiles, high-speed rail); Carbon (carbon “markets”,
carbon capture and storage, fossil fuel subsidies); Food and Agriculture (organic crops,
grain, sugar and fish/meat production and consumption); Global Resources (deforestation,
tropical forests); Population and Society (world labor force, “gender gaps”,
overweight/obesity).

Course Website: All handouts, assignments and notes will be available as PDFs for
download on this webpage:

Required Text: “Vital Signs 2012: The Trends That Are Shaping Our Future” by The
WorldWatch Institute (available at the UH Bookstore on campus, as a paperback through
amazon.com [$18.04], and as a Kindle Edition [$9.99]). Note: “Vital Signs” are published

Grading: Your grade will be based on the following:
30% Homework (One assignment for each lecture)
30% Midterm Exam (Covers Units 1-3)
40% Final Exam (Covers Units 1-7)
100% total

Note: up to +5% will be available for completion of an “extra credit” assignment! Further
details will be given as the course proceeds.

Student Learning Objective (SLO) Course Content:

This course strives to provide strong content commensurate with SLO #1: “Students can
explain the relevance of geology and geophysics to human needs, etc.” Within each and
every lecture we will discuss the implications of environmental change on human health,
agriculture and material economy.