GRADE DISTRIBUTION

EXAM 2

Maximum Scores
Exam 100
Atlas Ex. Cr. 8
TOTAL 108

Exam II Grade Distribution
Highest grade = 103
6 students scored 95+
A 14
B 19
C 30
D 17
F 9
Exams taken: 89
Exams missed: 5
Withdrawals: 5

REMINDERS

EXAM III – Final Exam
Tuesday, May 21
from 9 AM - 11 AM.
Covers Part III of the course.

TEXTBOOK READING FOR PART III
Selected parts of Chapters 6-12

Lecture Topics for Part III

I Intro. to Human Geography
II Living on the Earth
A. Habitat
B. Demography
C. Medical geography
D. Population growth
E. Biogeography/Ecology
III Economic Geography
IV Urban Geography
V Political Geography

REMINDERS

Extra Credit: Maximum of 5 “Think Geographically” Essays from any five Chapters 4-12
- OR -
The 3rd topic from req. essay list plus max 4 chapter essays
  Last day to submit is May 14 but it is best to do them as you finish reading a chapter.
  Any other form of extra credit proposal must be approved by me in advance by April 16

Two required essays (10% of your grade) were due April 9. Due by end of semester or else a 0 grade.
Late penalty now applies.

Any extra credit may be submitted before the deadline.
Don't wait for the night before to write them.

GEOG 101
PART III

20
Life on Earth:
Population Geography 1
Chapter 6

Prof. Anthony Grande
Hunter College Geography
5%

15%

55%

7% scattered concentrations

Over 80% of the world's people live in relatively high density: all need food, water, resources and space.

- 50% of the world's people live on 5% of the land.
- 90% of the world's people live on 10% of the land.
- 95% of the world's people live on 40% of the land.

Conversely, 60% of the land is virtually empty and has only 5% of the world’s people.

World’s Largest Countries

World Population estimate: 7.71 billion (7,710,000,000 as of February 2019)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>2019 Population</th>
<th>2018 Population</th>
<th>Growth Rate</th>
<th>Area (km²)</th>
<th>2018 Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>1,421,122,437</td>
<td>1,400,507,358</td>
<td>0.94%</td>
<td>9,596,961</td>
<td>146/km²</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>1,380,796,710</td>
<td>1,354,051,854</td>
<td>1.88%</td>
<td>3,087,950</td>
<td>416/km²</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>326,035,110</td>
<td>324,036,748</td>
<td>0.71%</td>
<td>9,372,140</td>
<td>35/km²</td>
</tr>
<tr>
<td>4</td>
<td>Indonesia</td>
<td>260,996,482</td>
<td>260,794,580</td>
<td>0.83%</td>
<td>1,791,549</td>
<td>147/km²</td>
</tr>
<tr>
<td>5</td>
<td>Brazil</td>
<td>212,302,177</td>
<td>210,957,554</td>
<td>0.72%</td>
<td>8,515,767</td>
<td>25/km²</td>
</tr>
<tr>
<td>6</td>
<td>Pakistan</td>
<td>204,945,367</td>
<td>200,805,976</td>
<td>1.88%</td>
<td>801,512</td>
<td>252/km²</td>
</tr>
<tr>
<td>7</td>
<td>Nigeria</td>
<td>200,553,551</td>
<td>195,875,237</td>
<td>2.60%</td>
<td>933,641</td>
<td>216/km²</td>
</tr>
<tr>
<td>8</td>
<td>Bangladesh</td>
<td>166,066,560</td>
<td>166,369,149</td>
<td>1.00%</td>
<td>1,471,785</td>
<td>1.13/km²</td>
</tr>
<tr>
<td>9</td>
<td>Russia</td>
<td>143,855,551</td>
<td>143,944,799</td>
<td>-0.06%</td>
<td>17,098,243</td>
<td>8/km²</td>
</tr>
<tr>
<td>10</td>
<td>Mexico</td>
<td>132,328,035</td>
<td>130,759,674</td>
<td>1.20%</td>
<td>1,944,375</td>
<td>67/km²</td>
</tr>
</tbody>
</table>

http://worldpopulationreview.com: interactive, live updating
Factors that Encourage Settlement and Higher Population Densities

1. Landforms (size, topography, altitude, situation)
2. Climate
3. Soil fertility
4. Natural vegetation and wildlife
5. Water supply
6. Mineral and energy resources
7. Absence of natural hazards (safe areas)
8. Absence of disease and pests (healthy areas)

• All 8 are modified by levels of technology and forms of economy.
• All 8 are influenced by historical circumstances and cultural parameters.

Soil Fertility vs. Population Density

Naturally fertile areas

World Population Density
Habitat Decisions

- 7.7 billion people need food, water, shelter, resources and living space + a place for their waste.
  - People have a perception of what the environment has to offer.
  - They make choices; people make changes.
  - They create mental images and mental maps.
  - They are influenced by push-pull-stay factors.

Push-Pull-Stay Factors

- **PUSH factor**: characteristic of a region that leads to dissatisfaction; encourages movement away (negative connotation).
- **PULL factor**: characteristic of a region that has an attractive force, drawing migrants from other regions (positive connotation).
- **STAY factor**: characteristic of a region that keeps people where they are (can either be positive or negative).

Push-Pull-Stay

These factors can be either real or imagined.

**Variables (perceptions) include:**
- Distance
- Physical barriers
- Cultural factors
- Political factors
- Economic factors

We need data to evaluate a population.

1. Numbers of people.
2. Concentration of people.
3. Other data to help assess a situation (quality of life)
Population Dynamics

Things we need to know about a population:
1. Where are they found (locations)?
2. What are their growth rates?
3. What is their density or grouping pattern?
4. What are the urban/rural ratios?
5. How do the numbers relate to an area’s resource base (habitat) and will it put a strain on the area’s carrying capacity (habitat quality)?

Carrying Capacity and Overpopulation

➢ CARRYING CAPACITY: The ability of the land to support life.
   ✓ It is directly related to resource base (food-water-shelter) which composes a habitat. Carrying capacity is reached if too many people use what is available and the resource base is stressed to its limit.
   ✓ Once carrying capacity is reached, the quality of habitat diminishes and an area is said to be overpopulated.

❖ OVERPOPULATION: Too many people for the resource base. (The term is also applied to animal habitats.)

Population Growth

Can the earth support its fast-growing population?
■ Does it have the capacity to keep up with a population’s demands on its resources?
■ How can we tell?
■ Need data.
❖ DEMOGRAPHY: statistical study of a population.

However, there is a problem with the data.
Accuracy of national censuses varies.

Historic Population Growth

What caused world population to increase dramatically starting in the late 1700s?
Population J-Curve

- Better medical practices.
- Understanding causes of illness and the transmission of disease.
- Improved sanitation.
- Better agricultural methods.
- Improved food supplies.
- Knowledge of nutrition.

Population Growth and Projections

1. World population growth has been fast since the mid-1900s.
2. It has been regionally uneven.
3. Estimates are based on current growth rates and they change over time and with reassessment of regional situations.

Population Growth and Projections

Greatest projected country population increases and declines between 2018-2050