**BIO1300 The Human Animal** 

**Topic 2: Humans** 

**Key Words** 

Molecular evidence

DNA in common Genetic differences

Early Homo H. habilis

H. rudolfensis

H. ergaster H. erectus

Brain size

Tool use Language

Culture

Oldowan tools Chipped rocks Predatory cats Human intelligence Sabre-toothed tiger

Nomadism Migration Acheulian tools

Axes Knives Blades

Coordinated hunting

Forced extinctions Global Migration Out of Africa

Fire

Colder climates

Social aspect of fireplace

The Hobbit

Homo floresiensis

South Pacific

Island dwarfism

Homo neanderthalensis
Middle East and Europe

Brain size Culture

Prominent face

Teeth as tools Thick bodies

Cold adapted

Sapiens-Neanderthal relationship

Reproductive hybridization

**Hunting abilities** 

Fishing Lifespan

Cultural transmission Mousterian tools

Scrapers Spear darts

Neanderthal extinction

Homo sapiens Cro-Magnon

Cooperative culture

Language

Art

Pleistocene extinctions

Mega-fauna Cold adapted Giant Elk Hairy Rhinos Mastodon

Sabre-toothed tiger *Giganthropithecus* Yeti/Bigfoot folklore

Mammoth Giant Sloth Giant Bison

Pleistocene Overkill Hypothesis

Cave paintings Lascaux, France Venus sculptures Musical instruments

North American migration

Bering land bridge Founder effect

Susceptibility to European diseases

Group hunters

Extinction of mega-fauna

Clovis tools Hunter/gatherers

Nomadism Hippocampus

Space-Time perception

The Great Leap Language

Larynx morphology

Tongue morphology
Diversity of sounds
Information flow
Cultural evolution
Lifecycle changes
Reduced reproduction
Prolonged learning
Complex lifestyle
Monogamy
Bi-parental care

Bi-parental care Community stability

Societies Cooperation Group protection Agriculture Sedentary living

Cities

Institutions

Industrial revolution Carbon pollution CO2 emissions

CO2-temperature link

Carbon cycle

Sources and sinks of carbon Release of fossilized carbon

Hockey stick curve Periods of glaciations Antarctic ice core samples

Increase above historic norms

**OECD** emissions

Role of Tar Sands exploitation

Greenhouse effect

Incoming short-wave radiation Outgoing long-wave radiation

Thermal blanket Greenhouse gases Trapped heat

Atmospheric temperatures

Climate patterns
Air circulation

Water currents

water currents

Weather patterns

Climate change

Arctic ice sheets

Sea level rise

Coastal flooding

Population migrations
Extreme weather events
Increased frequency
Increased intensity
Periodic glaciations
Advancing glaciers
Ottawa under ice

Pollen and spore evidence Coastline movements Bedrock striations Glacial deposits

Current trend in opposite direction