

08-78  
App-3/31/09  
Info. 4/21/09

FEB 27 2009

## Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours.)

### Existing and Special Topics Course

Course: LBST499: "Defining Humanness"

Instructor(s) of Record: Beverly Chiarulli

Phone: 7-2659

Email: bevc@iup.edu

#### Step One: Proposer

A. Provide a brief narrative rationale for each of the items, A1- A5.

1. How is/are the instructor(s) qualified in the distance education delivery method as well as the discipline?

I have been incorporating webct components into my courses since spring 2004. Courses taught with a webct component include sections of ANTH 110, ANTH 213 (World Archaeology), ANTH 244 (Basic Archaeology); ANTH 317 (Research Design and Theory); ANTH 481 (Mesoamerican Archaeology); and ANTH 415 (Cultural Resource Management). Since Fall 2006, I have taught a fully online section of ANTH 110. In these six semesters regular semesters and the 2008 winter session, I have become experienced in meeting the needs of online students and developing course materials that engage the students. The winter session experience provided me with an understanding of methods that can be used to enhance the learning experience of students in a shortened time frame.

I have a Ph.D. in Anthropology and have taught sections of ANTH 110 in traditional classroom sections since the Fall semester 1997. I am a member of the Provost's Advisory Committee on Distance Education, ACPAC, and the Virtual Environments Coordinating Committee so am familiar and experienced in the current issues and technologies related to distance learning.

2. How will each objective in the course be met using distance education technologies?

The course objectives for LBST499 "Defining Humaness" are that students will be able to:

- A. Examine the question of what it means to be human and the different ways that "humanness" has been defined.
- B. Contrast the mechanics of human origins through DNA decoding, fossil discoveries, and evidence from neuroscience to the larger philosophical questions of the origins of spiritual and religious beliefs.
- C. Analyze the evidence that disciplines use to define "humanness".
- D. Develop synthetic thinking skills by examining how ideas from the perspective of different disciplines address the same topic.
- E. Individualize the experience of participating in a challenging intellectual environment as they conclude their undergraduate education.

Objective A will be met through readings in What Makes us Human? edited by Charles Pasternak (2007) and supplemental articles and book chapters and through the development of an annotated bibliography maintained in the format of a reading journal.

Received

2/27/09

Liberal Studies

Objective B will be met through the readings and class discussion in the in depth sections of the class on “Genetics and Humanness” and, and “Neuroscience and Humanness” and participation in the class discussion list .

Objective C will be met through readings, the annotated bibliography, presentations, participation in the small group discussion and class discussion.

Objective D will be met Objective C will be met through readings, the annotated bibliography, presentations, participation in the small group discussion and class discussion.

Objective E will be met through the synthetic paper.

3. How will instructor-student and student-student, if applicable, interaction take place?

Instructor-student and student-student interaction will take place through the general class discussions and the small group discussions. The instructor will participate in the instructor-student discussions and some of the student-student discussions, although some of the student-student discussions may exclude the instructor.

4. How will student achievement be evaluated?

a) Annotated bibliographies will provide a way for students to summarize the major points of the articles they read along with one or two examples of the supporting evidence. This material will create structure for the students’ evaluations of the ideas they encounter. (25%)

b) In class discussions will provide a way for students to explore ideas in a group setting. (The online version of the course will modify the in-class format to a class blog. Students are often more willing and able to join online discussions than those in-class.) (20%)

c) Through group presentations, students will be able to work together to develop perspectives on each of the major topics. (The online version of the course will modify this activity to consist of small group chat discussions used to develop a web formatted presentation.) (25%)

d) The synthetic essay will be a culminating project in which students will be able to demonstrate their understanding of the topic and contrasting perspectives of the different disciplines. (30%)

5. How will academic honesty for tests and assignments be addressed?

Academic honesty will be addressed through comments on the syllabus and the use of “Turnitin”, a computer program designed to detect plagiarism available from Academic Technology Services.

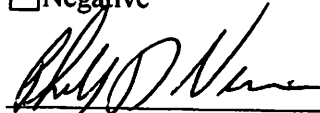
B. Submit to the department or its curriculum committee the responses to items A1-A5, the current official syllabus of record, along with the instructor developed online version of the syllabus, and the sample lesson. This lesson should clearly demonstrate how the distance education instructional format adequately assists students to meet a course objective(s) using online or distance technology. It should relate to one concrete topic area indicated on the syllabus.

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**Step Two: Departmental/Dean Approval**

Recommendation:  Positive (The objectives of this course can be met via distance education)

Negative



Signature of Department Designee

2-26-09

Date

Endorsed:



Signature of College Dean

3/9/09

Date

Forward form and supporting materials to Liberal Studies Office for consideration by the University-wide Undergraduate Curriculum Committee. Dual-level courses also require review by the University-wide Graduate Committee for graduate-level section.

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**Step Three: University-wide Undergraduate Curriculum Committee Approval**

Recommendation:  Positive (The objectives of this course can be met via distance education)

Negative



Signature of Committee Co-Chair

3/31/09

Date

Forward form and supporting materials to the Provost within 30 calendar days after received by committee.

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**Step Four: Provost Approval**

Approved as distance education course

Rejected as distance education course



Signature of Provost

Date

Forward form and supporting materials to Associate Provost.

LBST 499 SENIOR SYNTHESIS  
DEFINING "HUMANNESS"  
SYLLABUS OF RECORD

I. COURSE DESCRIPTION

One of the oldest questions human societies have tried to answer is "What makes us "human"?" Societies have defined "humanness" in different ways and many considered only themselves to be "human". Today, anthropologists, biologists, psychologists, sociolinguists, philosophers and theologians answer the question in different ways through the perspectives of science or philosophy. In this course, we will examine these different perspectives. We will examine the mechanics of "humanness" by considering the new information from DNA decoding, fossil discoveries, evidence from neuroscience, cultural changes as well as the larger philosophical questions.

II. COURSE OUTCOMES

In this course, students will be able to:

- A. Examine the question of what it means to be human and the different ways that "humanness" has been defined
- B. Contrast the mechanics of human origins through DNA decoding, fossil discoveries, and evidence from neuroscience to the larger philosophical questions of the origins of spiritual and religious beliefs.
- C. Analyze the evidence that disciplines use to define "humanness".
- D. Develop synthetic thinking skills by examining how ideas from the perspective of different disciplines address the same topic.
- E. Individualize the experience of participating in a challenging intellectual experience as they conclude their undergraduate education.

III. COURSE OUTLINE (15 weeks)

- A. Introduction: Opening our Conversation (1 week)
  1. Opening a conversation about the nature and value of synthetic and critical thinking: What is it? Why is it important? How does LBST499 differ from other courses?  
Reading: Blythe Clinchy, "Connected Knowing".
  2. How has "humanness" been defined through history? Readings from Edwin Black (2007) *War Against the Weak: Eugenics and America's Campaign to Create a Master Race* (This section of the course will examine how some of the definitions of humanness were used in eugenics against women and minorities. This history provides background for why there are some concerns today about some types of genetic testing.
- B. "What makes us human?" (3 weeks)

General introduction to the question and the answers from various disciplines?  
Based on What Makes us Human? Edited by Charles Pasternak (2007)

(This book contains a series of lectures by specialists from various disciplines addressing this question. Chapters include "Imitation Makes us Human", "Memory, Time and Language", "Why are Humans not just Great Apes?", "The Hominid that

Talked”, “Half Ape, Half Angel”, “Material Facts from a Nonmaterialist Perspective”, “What Make us Human? – Our Ancestors and the Weather”, “Curiosity and Quest”, “Human Evolution and the Human Condition”, “The Place of ‘Deep Social Mind’ in the Evolution of Human Nature”, “Causal Belief Makes us Human”, and “The Cooking Enigma”. Reading and discussing the topics will provide students with a general introduction into the topics and prepare them for an in depth examination of the topic.

C. Small Group Discussion of Student Synthetic Essays (1 week)

D. In-depth analyses (8 weeks)

1. Genetics and Humanness (2 weeks)

Discussions based on readings from Human Origins: What Bones and Genomes Tell Us about Ourselves (2008) by Rob Desalle and Ian Tattersall; Mapping Human History by Steve Olson

2. Neuroscience and Humanness (2 weeks)

Discussions based on readings from Human: The Science Behind What makes us Unique (2008) by Michael Gazzaniga; Kluge: The Haphazard Construction of the Human Mind by Gary Marcus

3. Culture and Humanness (2 weeks)

Discussions based on readings from Primates and Philosophers: How Morality Evolved (2009) by Frans de Waal, Stephen Macedo and Josiah Ober; The Stuff of Thought: Language as a Window into Human Nature (2008) by Stephen Pinker

4. Humanities and Humanness (2 weeks)

Discussions based on The Spiritual Dimension: Religion, Philosophy and Human Value (2005) by John Cottingham; More Than Human: Embracing the Promise of Biological Enhancement (2005) by Ramez Naam; The New Brain Sciences: Perils and Prospects (2008) by Dai Rees (Editor), Steven Rose (Editor)

E. Revisions and Small Group Discussion of Student Synthetic Essays (2 weeks)

#### IV. EVALUATION METHODS:

25% Annotated Bibliography. Students will write brief summaries of each of the articles and book chapters they read, summarizing the major points and one or two examples of the supporting evidence. This material will create structure to the students’ evaluations of the ideas they encounter.

20% Class Discussion. Students will discuss the weekly readings on a class blog. The discussions will be structured in that each week’s discussion will address a question raised by the readings. Two or three students will be asked to lead each discussion. For example, one discussion might address the topic like “Why are we subject to irrational beliefs, inaccurate memories, even war? Marcus says we can thank evolution. Do you agree? Do other readings contradict his view?” They will start by each presenting an aspect of the topic One might present evidence for and against evolution as the cause of “irrational beliefs”, another of “war”. Students will be expected to draw upon examples identified in their annotated bibliographies in the

discussions. Evaluations will be based on the coherence of the presentation and synthesis of ideas.

- 25% Presentations Developed through Small Group Discussions. In addition to the class blog, students will work in small groups of 4 or 5 to develop web presentations on each major topic. For example, each group of students will prepare a web presentation on one aspect of each major topic. Another example might be for the small groups to develop presentations during the discussion of "Genetics and Humanness" on topics like "How is DNA used to develop genetic histories?" or "What does it mean that modern humans and chimps share 98% of their DNA?" Each of these will be incorporated into the "In Depth Analysis" section of the course.
- 30% Synthetic Essay. At mid-term, students will prepare 5-7 page essays synthesizing their ideas about humanness. These will be shared and discussed in class in small groups. At the end of the term, students will return to their essays, rework and expand them into a final 10-12 page synthetic essay reflecting their thinking what defines "Humanness". These, too, will be shared and discussed in small groups prior to the final revision. Evaluation based on degree of integration of multiple perspectives, use of evidence, and logical development.

#### V. GRADING SCALE

90-100%	A
80-89%	B
70-79%	C
60-69%	D
Less than 60%	F

#### VI. ATTENDANCE POLICY

Because discussion and class participation are important components of this course, students are expected to attend all classes unless you provide written excuses for health or other substantive reasons. More than three unexcused absences will affect your grade.

#### VII. REQUIRED READINGS

Pasternak, Charles (editor) (2007). What Makes us Human? One World Press (212 pages)  
(Everyone will read this entire book)

SUPPLEMENTAL READINGS - approximately 1100 pp. drawn from reading one or two articles or chapters from each of the following

Black, Edwin (2007). War Against the Weak: Eugenics and America's Campaign to Create a Master Race (550 pages)

Cottingham, John (2005). The Spiritual Dimension: Religion, Philosophy and Human Value (198 pages)

Card, Orson Scott (1997) Pastwatch: The Redemption of Christopher Columbus (416 pages)

Desalle, Rob and Ian Tattersall (2008). What Bones and Genomes Tell Us about Ourselves (216 pages)

Gazzaniga, Michael (2008). Human: The Science Behind What Makes us Unique (464 pages)

- Huxley, Aldous (originally published 1932). Brave New World (288 pages)
- Marcus, Gary (2008). Kluge: The Haphazard Construction of the Human Mind (208 pages)
- Olson, Steve (2003). Mapping Human History: Genes, Race and Our Common Origins Mariner Books. (238 pages)
- Pinker, Stephen (2008). The Stuff of Thought: Language as a Window into Human Nature (512 pages)
- Ramez Naam (2005). More Than Human: Embracing the Promise of Biological Enhancement (288 pages)
- Rees, Dai and Steven Rose (2008). The New Brain Sciences: Perils and Prospects (316 pages)
- de Waal, Frans, Stephen Macedo and Josiah Ober (2009). Primates and Philosophers: How Morality Evolved (232 pages)

VI. SPECIAL RESOURCE REQUIREMENTS:

None

VII. BIBLIOGRAPHY

- Kevles, Daniel (1995). In the Name of Eugenics (Harvard University Press)
- Kurzweil, Ray (2008). The Singularity Is Near: When Humans Transcend Biology (Cambridge University Press)
- Newberg, Andrew and Mark Robert Waldman (2006). Why We Believe What We Believe: Uncovering Our Biological Need for Meaning, Spirituality, and Truth (Free Press)
- Pinker, Steven (2007). The Language Instinct: How the Mind Creates Language (Harper)
- Shubin, Neil (2008). Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body (Vintage)
- Tattersall, Ian (1999) Becoming Human: Evolution and Human Uniqueness (Harvest Books)
- Travis, Cheryl Brown editor (2003) Evolution, Gender, and Rape (The MIT Press)

LBST 499 SENIOR SYNTHESIS  
DEFINING "HUMANNESS"  
SYLLABUS (DISTANCE ED VERSION)

I. COURSE DESCRIPTION

One of the oldest questions human societies have tried to answer is "What makes us "human"?" Societies have defined "humanness" in different ways and many considered only themselves to be "human". Today, anthropologists, biologists, psychologists, sociolinguists, philosophers and theologians answer the question in different ways through the perspectives of science or philosophy. In this course, we will examine these different perspectives. We will examine the mechanics of "humanness" by considering the new information from DNA decoding, fossil discoveries, evidence from neuroscience, cultural changes as well as the larger philosophical questions.

II. COURSE OUTCOMES (OBJECTIVES)

In this course, students will be able to:

- A. Examine the question of what it means to be human and the different ways that "humanness" has been defined
- B. Contrast the mechanics of human origins through DNA decoding, fossil discoveries, and evidence from neuroscience to the larger philosophical questions of the origins of spiritual and religious beliefs.
- C. Analyze the evidence that disciplines use to define "humanness".
- D. Develop synthetic thinking skills by examining how ideas from the perspective of different disciplines address the same topic.
- E. Individualize the experience of participating in a challenging intellectual environment as they conclude their undergraduate education.

III. COURSE OUTLINE (15 weeks)

- A. **Introduction: Opening our Conversation (1 week) Evaluation methods include initial preparation of one entry in the Annotated Bibliography and blog entry addressing question "How has "humanness" been defined through history?"**
  1. Opening a conversation about the nature and value of synthetic and critical thinking: What is it? Why is it important? How does LBST499 differ from other courses? Reading: Blythe Clinchy, "Connected Knowing"
  2. How has "humanness" been defined through history? Readings from Edwin Black (2007) War Against the Weak: Eugenics and America's Campaign to Create a Master Race (This section of the course will examine how some of the definitions of humanness were used in eugenics against women and minorities. This history provides background for why there are some concerns today about some types of genetic testing.
- B. **"What makes us human?" (3 weeks) Evaluation methods include preparation of at least two entries in the Annotated Bibliography and two blog entries addressing questions like "Are we "human" because of our anatomy or our "cognition?" or "Is it our memory, our language, our cooking or our souls that defines humanity? In addition, students prepare midterm synthetic paper.**



General introduction to the question and the answers from various disciplines?"  
Based on What Makes us Human? Edited by Charles Pasternak (2007)

(This book contains a series of lectures by specialists from various disciplines addressing this question. Chapters include "Imitation Makes us Human", "Memory, Time and Language", "Why are Humans not just Great Apes?", "The Hominid that Talked", "Half Ape, Half Angel", "Material Facts from a Nonmaterialist Perspective", "What Make us Human? – Our Ancestors and the Weather", "Curiosity and Quest", "Human Evolution and the Human Condition", "The Place of 'Deep Social Mind' in the Evolution of Human Nature", "Causal Belief Makes us Human", and "The Cooking Enigma". Reading and discussing the topics will provide students with a general introduction into the topics and prepare them for an in depth examination of the topic.

- C. Small Group Discussion of Student Synthetic Essays (1 week) **Students complete midterm synthetic essay and discuss each others essays on the small group blog.**
- D. In-depth analyses (8 weeks) **Evaluation methods include each student group preparing a web presentation on one of the topics, 6 blog entries, and the preparation of 7 entries in the annotated bibliography.**
1. Genetics and Humanness (2 weeks)  
  
Discussions based on readings from Human Origins: What Bones and Genomes Tell Us about Ourselves (2008) by Rob Desalle and Ian Tattersall; Mapping Human History by Steve Olson
  2. Neuroscience and Humanness (2 weeks)  
  
Discussions based on readings from Human: The Science Behind What makes us Unique (2008) by Michael Gazzaniga; Kluge: The Haphazard Construction of the Human Mind by Gary Marcus
  3. Culture and Humanness (2 weeks)  
  
Discussions based on readings from Primates and Philosophers: How Morality Evolved (2009) by Frans de Waal, Stephen Macedo and Josiah Ober; The Stuff of Thought: Language as a Window into Human Nature (2008) by Stephen Pinker
  4. Humanities and Humanness (2 weeks)  
  
Discussions based on The Spiritual Dimension: Religion, Philosophy and Human Value (2005) by John Cottingham; More Than Human: Embracing the Promise of Biological Enhancement (2005) by Ramez Naam; The New Brain Sciences: Perils and Prospects (2008) by Dai Rees (Editor), Steven Rose (Editor)
- E. Revisions and Small Group Discussion of Student Synthetic Essays (2 weeks) **Evaluation methods include the preparation of the final synthetic paper and final blog and two final entries in the annotated bibliography.**

#### IV. EVALUATION METHODS:

- 25% Annotated Bibliography. Students will write brief summaries of each of the articles and book chapters they read, summarizing the major points and one or two examples of the supporting evidence. This material will create structure to the students' evaluations of the ideas they encounter and will be maintained in an online journal

that will be graded occasionally through the semester. **The Annotated Bibliography will be worth 25 points. Each summary will be worth 2 points. To receive full credit, students must prepare summaries of at least 12 articles, each at least 200 words in length.**

- 20% **Class Discussion.** Students will discuss the weekly readings on a class blog. The discussions will be structured in that each week's discussion will address a question raised by the readings. Two or three students will be asked to lead each blog by first providing a "column" presenting an aspect of the topic. One might present evidence for and against evolution as the cause of "irrational beliefs", another of "war". Students will be expected to draw upon examples identified in their annotated bibliographies in the discussions. . For example, one discussion might address the topic like "Why are we subject to irrational beliefs, inaccurate memories, even war? Marcus says we can thank evolution. Do you agree? Do other readings contradict his view?" One student might present evidence for and against evolution as the cause of "irrational beliefs". Students will be expected to draw upon examples identified in their annotated bibliographies in the discussions. Evaluations will be based on the coherence of the presentation and synthesis of ideas. The rest of the class and the instructor will then continue the discussion adding new ideas drawn from other disciplinary perspectives. **The blog will be graded on a scale of up to 20 points. Evaluation will be based on the number and length of submissions by each student and the connection they make to the readings. There will be 10 blog topics each worth 2 points. To receive full credit for each, students must provide an example from one of their readings, and the submission must be at least 100 words in length.**
- 25% **Presentations Developed through Small Group Discussions.** In addition to the class blog, students will work in small groups of 4 or 5 to develop web presentations on each major topic. Each group of students will prepare a web presentation on one aspect of each major topic. Another example might be for the small groups to develop presentations during the discussion of "Genetics and Humanness" on topics like "How is DNA used to develop genetic histories?" or "What does it mean that modern humans and chimps share 98% of their DNA?" Each of these will be incorporated into the "In Depth Analysis" section of the course. **The presentations will be graded on a scale of up to 25 points. Each group will prepare 4 presentations, one for each of the Indepth topics. Each will have a maximum score of 6 points. Full credit will require that the group of students prepare a web presentation on time, that it follow the format of "Question", "Background", "Evidence or Perspective", and "Conclusion" and be at least 300 words long with 2 illustrations.**
- 30% **Synthetic Essay.** At mid-term, students will prepare 5-7 page essays synthesizing their ideas about humanness. These will be shared and discussed in class in small groups. At the end of the term, students will return to their essays, rework and expand them into a final 10-12 page synthetic essay reflecting their thinking what defines "Humanness". These, too, will be shared and discussed in small groups prior to the final revision. Evaluation based on degree of integration of multiple perspectives, use of evidence, and logical development. **The midterm essay will be graded on a scale of up to 10 points (10% of the grade). Full credit will require that the essay be submitted on time and that it synthesize the perspectives from at least three disciplines as indicated by the use of at least 5 references, be clearly written and at least 5 pages in length. The final paper will be worth up to 20 points (20% of the grade). Full credit will require that the essay be submitted on time and that it synthesize the perspective of at least 5 disciplines as indicated by the use of at least 10 references, be clearly written and at least 10 pages in length.**

## V. GRADING SCALE

90-100%	A
80-89%	B
70-79%	C
60-69%	D
Less than 60%	F

**There will be a total of 100 points for the course. An “A” will require that a student achieve at least 90 points, a “B” 80 points, a “C” 70 points, a “D” 60 points, and a “F” less than 60 points.**

## VI. ATTENDANCE POLICY

As an online class there is no attendance requirement. However, students are required to meet the course deadlines in a timely fashion to meet their obligation for participation in the communal class projects.

## VII. ACADEMIC DISHONESTY

As described in the IUP Student Handbook, The Source, pp. 58-62 certain standards of academic integrity and honesty are essential within our community. It is your responsibility to know what constitutes a violation of IUP's standards on academic integrity. I will seek to resolve any incidents of academic dishonesty through an informal conference, but you should expect to earn no points for the work involved in such incidents and your grade could be lowered as well. The same standards for academic honesty apply to an online course as well as for a traditional course. You are expected to complete your assignments independently. Resources may be drawn from the internet and it is your responsibility to reference websites you use for some of the class research activities. Using essays obtained through the internet is a violation of academic honesty. IUP subscribes to a service (Turnitin) which can identify plagiarism and will be used in this course.

## VIII. REQUIRED READINGS

Pasternak, Charles (editor) (2007). What Makes us Human? One World Press (212 pages)  
(Everyone will read this entire book)

SUPPLEMENTAL READINGS - approximately 1100 pp. drawn from reading one or two articles or chapters from each of the following

Black, Edwin (2007). War Against the Weak: Eugenics and America's Campaign to Create a Master Race (550 pages)

Cottingham, John (2005). The Spiritual Dimension: Religion, Philosophy and Human Value (198 pages)

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Desalle, Rob and Ian Tattersall (2008). What Bones and Genomes Tell Us about Ourselves (216 pages)

Gazzaniga, Michael (2008). Human: The Science Behind What Makes us Unique (464 pages)

Huxley, Aldous (originally published 1932). Brave New World (288 pages)

Marcus, Gary (2008). Kluge: The Haphazard Construction of the Human Mind (208 pages)

Olson, Steve (2003). Mapping Human History: Genes, Race and Our Common Origins Mariner Books. (238 pages)

Pinker, Stephen (2008). The Stuff of Thought: Language as a Window into Human Nature (512 pages)

Ramez Naam (2005). More Than Human: Embracing the Promise of Biological Enhancement (288 pages)

Rees, Dai and Steven Rose (2008). The New Brain Sciences: Perils and Prospects (316 pages)

de Waal, Frans, Stephen Macedo and Josiah Ober (2009). Primates and Philosophers: How Morality Evolved (232 pages)

VI. SPECIAL RESOURCE REQUIREMENTS:

None

VII. BIBLIOGRAPHY

Kevles, Daniel (1995). In the Name of Eugenics (Harvard University Press)

Kurzweil, Ray (2008). The Singularity Is Near: When Humans Transcend Biology (Cambridge University Press)

Newberg, Andrew and Mark Robert Waldman (2006). Why We Believe What We Believe: Uncovering Our Biological Need for Meaning, Spirituality, and Truth (Free Press)

Pinker, Steven (2007). The Language Instinct: How the Mind Creates Language (Harper)

Shubin, Neil (2008). Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body (Vintage)

Tattersall, Ian (1999) Becoming Human: Evolution and Human Uniqueness (Harvest Books)

Travis, Cheryl Brown editor (2003) Evolution, Gender, and Rape (The MIT Press)

## Sample Module

### Student Small Group Web Presentation Topics for Genetics and "Humanness"

**General Instructions:** Each group should select one of these topics to develop into a web presentation on your topic. You should then discuss what these tell us about how "humanness" is constrained or expanded by our DNA. Remember, the presentations will be graded on a scale of up to 6 points. Full credit will require that the group of students prepare a web presentation on time, that it follow the format of "Question", "Background", "Evidence or Perspective", and "Conclusion" and be at least 300 words long with at least 2 illustrations.

**Topic 1: DNA and Human History** Points you might cover could include How has DNA been used to map human history? What does it mean to say that all modern humans are descended from a single female ancestor? Where and when did this woman live? How closely related are all living modern humans (How many common ancestors do we share?)

**Topic 2: What does it mean that humans and Chimps share 98% of their DNA?** You may have heard this statement, but what does it mean? Do humans and chimps share more DNA than human and other mammals? Explore this topic in your presentation.

**Topic 3: How does DNA Analysis Work?** Some of the questions you might consider are: What is a "DNA" Analysis? How is it done? What is compared? What is the difference between Y-Chromosome and mitochondrial DNA? How many samples

**Topic 4: Eugenics and DNA** Some people believe that DNA analysis may spark a new "eugenics" movement. Is that possible? Will we really see a "new" *Brave New World*?

**Topic 5: Cloning Neanderthals** There has been some discussion of using cloning technology with Neanderthal DNA to bring a "Neanderthal" to life. What are the implications of this use of technology? Is it just a "since we can do it, let's do it?" decision? Or are there greater moral implications? Would the Neanderthal be "Human"?

**Topic 6: Mugged by our Genes?** For years there has been a debate about whether our behavior is influenced more by our genes or environment. Some studies suggest that the question is more complicated in that our genes cause us to seek environments that have negative consequences. For example, according to a recent column in the New York Times: We tend to think of the environment as something that just happens to us, but in fact animals actively seek out surroundings that are compatible with their genetic predispositions. Teenagers in the chess club choose to be exposed to different influences from their hockey-player counterparts. Such differences don't even have to

be voluntary: tall kids may be picked more often for the basketball team and end up better at the game because they have more opportunities to develop their skills.  
(MARCH 24, 2009 Guest Column: Mugged By Our Genes? By Sandra Aamodt and Sam Wang) Do we increase our likelihood to be mugged because of a gene for risk taking?

Topic 7: Suggest your own topic. (Remember, it must be approved by me).