RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE

ANTH 102 Human Origins

I. Basic Course Information

A. Course Number and Title: ANTH-102 Human Origins

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Spring Year: 2013

D. Sponsoring Department: Social Sciences

E. Semester Credit Hours: 3

F. Weekly Contact Hours: 3
   Lecture: 3
   Laboratory: 0

G. Prerequisites/Corequisites: Placement into ENGL111 English Composition I with ENGL070 English Composition I Workshop, or higher

H. Laboratory Fees: None

I. kgutshal@raritanval.edu

II. Catalog Description

Placement into ENGL111 English Composition I with ENGL070 English Composition I Workshop, or higher.
Using the concepts of evolutionary biology we trace the emergence of humans and their near relatives, the non-human primates. Through both the various theories and methodologies of physical anthropology and related disciplines, students examine the fossil and archeological record to understand the evolution of humans as a bio-social animal. Emphasis is also placed on the different ways in which anthropologists work to gain their information and interpret their data. There may be an optional field trip to a local museum.

III. Statement of Course Need
A. The course is one of two general introductory courses in anthropology and serves as a prerequisite for further courses of study in physical anthropology and archeology.

B. Not applicable

C. This course generally transfers as a specific General Education course and historically has had no problems transferring to four-year institutions.

IV. Place of Course in College Curriculum

A. Course can serve a Free Elective depending upon the degree or certificate program

B. This course serves as a General Education course in the Social Sciences.

C. This course meets a program requirement for:
   a. Social Science Option
   b. Education degrees

D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

A. Anthropology as a discipline-The four field approach
   1. Social anthropology
   2. Physical anthropology
   3. Linguistics
   4. Socio-cultural anthropology
   5. The inter-relatedness of the humanity as bio-cultural animals

B. Human biological and social uniqueness among animals

C. Humans shared biological and social characteristics with other animals

D. The origins and significance of human biological and social variation

E. The concept and processes of evolution
   1. Natural selection
   2. Mutation
   3. Gene flow
   4. Reproductive isolation
   5. Genetic drift
   6. Human impact upon evolutionary processes
      a. Ethical implications

F. Geologic Time
   1. How do we measure it
   2. Relative vs Absolute
      a. Different methodologies
   3. Significance in understanding evolution
   4. The geological record, especially the Cenozoic

F. The origins and evolution of primates
   1. The fossil record
2. Changing physical characteristics through time
3. Primate taxonomy

G. The first humans
   1. The Miocene/Pliocene boundary homini
   2. The Pliocene hominids
   3. The emergence of bipedalism
   4. The molecular vs. fossil evidence
      a. The molecular clock
      b. Constant mutation rates

H. Pliocene/Pleistocene hominids/physical changes and the emergence of the archeological record
   1. Early Human variation
      a. Splitters vs. lumpers
   2. The emergence of the genus homo
   3. Brain expansion and neurological re-organization
   4. The emergence of the archeological record

I. Out of Africa-The First Time
   1. Human expansion to Europe and Asia
   2. Continuing physiological changes
      a. The fossil record
         1. Homo erectus/Homo ergaster
         2. Early Homo sapiens
         3. Neandertal
         3. Human biological variation
   3. Continuing socio-cultural changes
      a. The archeological record and its diversification
   4. Human adaptation as a function biological and social evolution

J. Out of Africa Again-The Emergence of Homo sapiens sapiens
   1. Multi-regionalism
   2. Out of Africa Replacement
   3. Neandertals and Homo sapiens sapiens: Their relationship
   4. The continuing diversification of the fossil and archeological records
   5. The creative explosion
   6. Humans as foragers: The long evolutionary record

K. Human Expansion Beyond the Old World
   1. The route to the Americas
   2. The route to Australia
   3. Evidence and controversies

L. The shift from Foraging to Agriculture
   1. Different centers for food production
   2. Theories for their origins
   3. Consequences of the shift in food acquisition
VI. General Education and Course Learning Outcomes

A. General Education Learning Outcomes:

At the completion of the course, students will be able to:
1. Use evolutionary processes as meaningful way to explain biological and behavioral similarities and differences among animals, especially non-human primates. (GE NJ3)
2. Explain how archeologists and related disciplines measure geologic time. (GE NJ3)
3. Offer and evaluate contrasting theories for the emergence of bipedalism and neurological expansion amongst humans. (GE NJ3)
4. Be able to use the principles and data associated with molecular biology to evaluate the time of divergence amongst the various primates. (GE NJ2)
5. Demonstrate familiarity with the emergence, timing and significance of those behavioral characteristics that are thought to be universal among Homo sapiens. (GE NJ 5 and 7)
6. Describe the physiological changes associated with each major fossil group or stage of human evolution. (GE NJ5)
7. Using two examples, explain both the causes and significance of physical and cultural differences among contemporary human populations (GE NJ8)
8. Critically evaluate the ethical consequences of human technology upon the evolutionary processes. (Ethical reasoning *)

*( Embedded Critical Thinking)

B. Course Learning Outcomes:

At the completion of the course, students will be able to:
1. Cite the general characteristics of the four-field discipline of anthropology and the manner in which they collect their data, especially physical anthropologists and archeologists
2. Critically evaluate the similarities and differences at the biological level for humans and other animals, especially non-human primates.
3. Critically evaluate the similarities and differences at the socio-cultural level for humans and other animals, especially non-human primates.
4. Using the principles and processes of evolution present arguments for the emergence of bipedalism and neurological expansion.
5. Critically evaluate the differences in the methodologies and interpretations offered by the molecular biologists and the fossil hunters.
6. Discuss the impact that environmental changes played during the emergence of homini and their subsequent expansion throughout the world
7. Describe the consequences of the shift to food production upon humanity.
8. Critically evaluate the growing impact of human culture upon the future evolution of humans as biological animals

VII. Modes of Teaching and Learning

A. Lecture/discussion
B. Individual or small-group exercises
C. Independent study
D. Museum visit
E. Zoo visit
F. Films

VIII. Papers, Examinations, and other Assessment Instruments

A. essays
B. multiple choice exams
C. in class free writes
D. map test

IX. Grade Determinants

A. essays
B. tests
C. Free writes

X. Texts and Materials

Essentials of Physical Anthropology
AUTHOR:Larsen, Clark Spencer
EDITION: 2nd
COPYRIGHT YEAR:2013
PUBLISHER:W. W. Norton & Company, Incorporated
ISBN:9780393919387

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

XI. Resources

Not applicable at this time

XII. Honors Options [if relevant]

Not applicable at this time
New Jersey Community College General Education Philosophy: Students are empowered to meet twenty-first century challenges through learning processes that lead to knowledge acquisition, skills mastery, critical thinking, and the exercise of personal, social, and civic responsibilities.

The Colleges maintain responsibility for offering a general education program whose learning objectives facilitate attainment of all NJCC Gen Ed Learning Goals. Course-level learning objectives must be consistent with the Individual College-Wide Learning Objectives that fulfill the NJCC Gen Ed Learning Goals. (Local general education courses must also be consistent with NJCC GE Course Criteria for satisfying requirements.)

<table>
<thead>
<tr>
<th>NJCC Goal Categories (Course Category)</th>
<th>NJCC Gen. Ed. Learning Goals Critical thinking is embedded</th>
<th>Suggested Individual College-Wide Learning Objectives: Colleges have discretion in the establishment of Individual College-Wide Learning Objectives that support the achievement of the NJCC Learning Goals. The following is a list of examples.</th>
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<tr>
<td>1 Written and Oral Communication (Communication)</td>
<td>Students will communicate effectively in both speech and writing.</td>
<td>a. Students will explain and evaluate what they read, hear, and see. b. Students will state and evaluate the views and findings of others. c. Students will logically and persuasively state and support orally and in writing their points of view or findings. d. Students will evaluate, revise, and edit their communication.</td>
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<tr>
<td>2 Quantitative Knowledge and Skills (Mathematics)</td>
<td>Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.</td>
<td>a. Students will translate quantifiable problems into mathematical terms and solve these problems using mathematical or statistical operations. b. Students will construct graphs and charts, interpret them, and draw appropriate conclusions.</td>
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<tr>
<td>3 Scientific Knowledge and Reasoning (Science)</td>
<td>Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.</td>
<td>a. Applying the scientific method, students will analyze a problem and draw conclusions from data and evidence. b. Students will distinguish between scientific theory and scientific discovery, and between science and its scientific technological applications, and they will explain the impact of each on society.</td>
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<td>4 Technological Competency or Information Literacy (Technology)</td>
<td>Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.</td>
<td>a. Students will use computer systems and/or other appropriate forms of technology to present information. b. Students will use appropriate forms of technology to identify, collect, and process info. c. Students will use appropriate library/learning resource tools such as cataloging systems to access information in reference publications, periodicals, bibliographies, and data bases. d. Students will recognize when information is needed and be able to locate, evaluate, and use information.</td>
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<tr>
<td>5 Society and Human Behavior (Social Science)</td>
<td>Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.</td>
<td>a. Students will analyze and discuss behavioral or societal issues using theories and concepts from a social science perspective. b. Students will explain how social institutions and organizations influence individual behavior. c. Students will describe and demonstrate how social scientists gather and analyze data.</td>
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<td>6</td>
<td>Humanistic Perspective (Humanities)</td>
<td>Students will analyze works in the fields of art, music, or theater; literature; and philosophy and/or religious studies; and will gain competence in the use of a foreign language.</td>
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|   |   | a. Students will describe commonly used approaches and criteria for analyzing works*.
|   |   | b. Students will analyze works* and applying commonly used approaches and criteria.
|   |   | c. Students will demonstrate a value added competence in the production and comprehension of a foreign language.
|   |   | * in the fields of art, music, or theater; literature; philosophy and/or religious studies and possibly within the context of studying and using a language other than English. |

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<th>7</th>
<th>Historical Perspective (History)</th>
<th>Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.</th>
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|   |   | a. Students will state the causes of a major historical event and analyze the impact of that event on a nation or civilization.
|   |   | b. Students will discuss a major idea, movement, invention or discovery, and how it affected the world or American society.
|   |   | c. Students will demonstrate how writers’ interpretations of historical events are influenced by their time, culture, and perspective. |

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<th>8</th>
<th>Global and Cultural Awareness (Diversity courses)</th>
<th>Students will understand the importance of a global perspective and culturally diverse peoples.</th>
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|   |   | a. Students will link cultural practices and perspectives with geographic and/or historical conditions from which they arose.
|   |   | b. Students will explain why an understanding of differences in people’s backgrounds is particularly important to American society.
|   |   | c. Students will recognize and explain the possible consequences of prejudicial attitudes and discriminatory actions.
|   |   | d. Students will recognize and assess the contributions and impact of people from various nations and/or cultures. |

### NJ CCC Integrated Goals

| Ethical Reasoning and Action | Students will understand ethical issues and situations. | a. Students will analyze and evaluate the strengths and weaknesses of different perspectives on an ethical issue or a situation.
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<td>b. Students will take a position on an ethical issue or a situation and defend it.</td>
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| Information Literacy | Students will address an information need by locating, evaluating and effectively using information. | a. Students will identify and address an information need.
|---|---|---|
|   |   | b. Students will access information effectively and efficiently.
|   |   | c. Students will evaluate and think critically about information.
|   |   | d. Students will use information effectively for a specific purpose.
|   |   | e. Students will use information ethically and legally. |

Note: This document should be used in conjunction with the General Education Foundation (9-6-2011) and the NJCC GE Course Criteria (9-6-2011).