Archaeology / Anthropology 589: Nutritional Anthropology
Fall Semester 2005

Professor: Warren Wilson  Lecture: Weds. 9:00-12:00, ES 908
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Office: ES 852  Office hours: Weds. 2:00-3:30, Thurs. 1:30-3:00, and by appt.
Web-site: http://www.fp.ucalgary.ca/physanth/warren_wilson.htm

Course Description and Goal

Over 150 years ago, Jean Anthelme Brillat-Savarin wrote, “…tell me what thou eat and I will tell thee what thou art.” Cannon (1964) expanded upon this stating that, “…not only biography and genealogy, but the whole field of anthropology could, if one knew the code, be deduced from food.”

Is food, in fact, a fundamental part of our identity? Today, in Calgary, who we are may seem somewhat removed from what we eat. The cultural distance that some of us now experience from our favored foods, however, has not always been so great. In fact, human behavior has evolved in great part as an interplay between the environments our ancestors inhabited, their eating behavior, and cultural institutions. Prior to the industrial revolution and in most societies which continue some sort of pre-industrial subsistence pattern, much of an individual’s daily activities were and are devoted to the production of food for their own consumption; a process mediated by both cultural and ecological factors.

The goal of this course is to help you to understand human dietary behaviors as the result of a dynamic web of ecological and cultural factors. To do this, we will cover eight subject areas: (1) the development of nutritional anthropology, (2) basic nutritional principles, (3) basic ecological principles, (4) diet from an evolutionary, comparative, and historic perspective, (5) cultural factors influencing diet, (7) the impact of undernutrition on human physiology and behavior, and (8) methods in nutritional anthropology.

Course Conventions

1. Lecture/Discussion: In order to meet the goals of the course you have to attend class regularly and on time. You must be prepared to discuss the assigned topic. You are responsible for lecture material and any announcements concerning changes in schedule, etc.

2. Reading: A careful and critical read of the assigned material is necessary. Keep in mind that you are not finished with the reading assignment until you thoroughly understand it. This will sometimes require you to read an assignment more than once. The assigned questions are designed to assist you in your critical evaluation of the material you are reading.

Required Texts:
Wilson 2005. Nutritional Anthropology Reader
Dettwyler 1994. Dancing Skeletons

Optional Text:
Whitney & Rolfs 2005. Understanding Nutrition
or Reader which includes Ch. 3-6 from this text.
3. **Evaluation:** You will be evaluated in this course on the basis of your in-class participation, short answer questions on the readings, a dietary intake project, a review of a journal article, a term paper, and a presentation of your term paper.

You must provide advance notice to me if you are unable to complete an assignment by the due date. All requests for deferral of a due date to health reasons must be accompanied by written documentation as outlined in the University Calendar and should be obtained while the student has the physical or emotional problem rather than after recovery. Travel arrangements and misreading of the syllabus are not valid reasons for requesting a deferred due date. Deferred due dates will not be granted if it is determined that just cause is not shown by the student.

Your final mark will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation</td>
<td>22%</td>
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<tr>
<td>Journal article review</td>
<td>8%</td>
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<tr>
<td>Short-Answer Questions</td>
<td>26%</td>
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<tr>
<td>Dietary Intake/Energy Expenditure Study</td>
<td>20%</td>
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<tr>
<td>Term Paper/Presentation</td>
<td>24%</td>
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**Letter grade assignment:** At the end of the course, the numerical marks will be summed and a final letter grade will be assigned based on the following basis:

<table>
<thead>
<tr>
<th>Percentage range</th>
<th>Letter grade</th>
<th>Percentage range</th>
<th>Letter grade</th>
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<tbody>
<tr>
<td>95 or higher</td>
<td>A+</td>
<td>68-72</td>
<td>C+</td>
</tr>
<tr>
<td>90-94</td>
<td>A</td>
<td>64-67</td>
<td>C</td>
</tr>
<tr>
<td>85-89</td>
<td>A-</td>
<td>59-63</td>
<td>C-</td>
</tr>
<tr>
<td>81-84</td>
<td>B+</td>
<td>54-58</td>
<td>D+</td>
</tr>
<tr>
<td>77-80</td>
<td>B</td>
<td>50-53</td>
<td>D</td>
</tr>
<tr>
<td>73-76</td>
<td>B-</td>
<td>49 or lower</td>
<td>F</td>
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4. **Academic Misconduct:** cheating is regarded as a serious academic offense. Students are advised to consult the University Calendar, which presents a Statement of Intellectual Honesty and definitions and penalties associated with cheating, plagiarism, and other academic misconduct.

5. **Retrieving Assignments:** The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside an instructor’s office or the Department main office. Term assignments must be returned to students individually, during class, or during my office hours; if a student is unable to pick up her/his assignment s/he may provide me with a stamped, self-addressed envelope to be used for the return of the assignment.

6. **Academic Accommodation:** Students with a disability, who require academic accommodation, need to register with the Disability Resource Centre (MC 295, telephone 220-8237). Academic accommodation letters need to be provided to me no later than fourteen (14) days after the first day of class. It is a student’s responsibility to register with the Disability Resource Centre and to request academic accommodation, if required.

7. **Office Hours:** I enjoy having visitors during my office hours and am happy to schedule additional times as necessary. These hours are yours and I encourage you to take advantage
of them, whether you are having difficulty with some aspect of the course, or if you would like to discuss in greater detail something that was touched on in class.

8. E-mail: Students are encouraged to use the lectures and office hours to ask questions. For after-hours questions, the use of email is acceptable. Please write ‘ANTH 589’ or ‘ARKY 589’ in the ‘Subject’ portion of the email. I receive numerous e-mails everyday. By clearly identifying the subject of your email, you will help me reply more efficiently to your emails. Note that if I think that your question and related answer is of general interest, I may decide to post them on the course Blackboard space (your name will not appear).

Safewalk: The University of Calgary provides a “safe walk” service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-5333. Campus Security can also be contacted from any of the “Help” phones located around Campus.

Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Assignment</th>
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<tbody>
<tr>
<td>Sept. 14</td>
<td>Introduction, Anthropology, Science</td>
<td></td>
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<tr>
<td>Sept. 21</td>
<td>Nutritional anthropology in the field: field work</td>
<td>“Scientists’ Tools”, Dettwyler 1994 (all chapters)</td>
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<tr>
<td>Oct. 5</td>
<td>Basic principles of nutrition: physiology of digestion, macro- &amp; micronutrients</td>
<td>Whitney and Rolfs 2005: Ch. 1, 3, and one of 4, 5, or 6</td>
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Note: Your dietary intake project is due no later than 4:00 pm on Friday, October 14.

Turn this in at the wooden box outside the Archaeology main office (ES 806)

| Nov. 30  | Student Presentations | Abstracts of papers to be presented                                                   |
| Dec. 7   | Student Presentations | Abstracts of papers to be presented                                                   |

1 Available on reserve in MacKimmie Library.
2 Suggested for undergraduate students. Required for graduate students.
Course Bibliography: ANTH/ARKY 589 (Fall 2005)

Ackerman, Diane. 1990. *A Natural History of the Senses*. Vintage Books, NY, NY. Pp. 127-143 (Although I have provided the entire chapter on taste, you are only required to read the following three sections from this chapter: “The Social Sense”, “The Omnivore’s Picnic”, and “Bloom of a Taste Bud”.)


Scientists’ tools for skeptical thinking include the following:

1. **Spin more than one hypothesis.** If there’s something to be explained, think of all the different ways in which it *could* be explained. Then think of tests by which you might systematically disprove each of the alternatives. The reliance upon carefully designed and controlled experiments is key (we will not learn much from mere contemplation). What survives, the hypothesis that resists disproof in this selection among “multiple working hypotheses,” has a much better chance of being the right answer than if you had simply run with the first idea that caught your fancy.

2. **Always ask whether the hypothesis proposed can be, at least in principle, falsified.** Propositions that are untestable, unfalsifiable are not worth much. Consider the grand idea that the Universe and everything in it is just an elementary particle—an electron say—in a much bigger Cosmos. But if we can never acquire information from outside our Universe, is not the idea incapable of disproof? You must be able to check assertions out. Inveterate skeptics must be given the chance to follow your reasoning, to duplicate your experiments and see if they get the same result.

3. **Try not to get overly attached to a hypothesis just because it’s yours.** It’s only a way station in the pursuit of knowledge. Ask yourself why you like the idea. Compare it fairly with the alternatives. See if you can find reasons for rejecting it. If you don’t, others will. In science, once you generate a hypothesis your goal is to see if you can reject it, not to support it. If you can’t reject it with your research, then it has some support.

4. **Quantify.** If whatever it is you’re explaining has some measure, some numerical quantity attached to it, you’ll be much better able to compare your results with those of others and to discriminate among competing hypotheses. What is vague and qualitative is open to many explanations. Of course there are truths to be sought in the many qualitative issues we are obliged to confront, but finding them is more challenging.

5. If there is a chain of argument, *every link in the chain must work*—not just most of them.

6. Wherever possible there must be independent confirmation of the facts.

7. **Encourage substantive debate** on the evidence by knowledgeable proponents of all points of view.

8. **Arguments from authority carry little weight.** Science is one of the only ways of knowing about the world that encourages its practitioners to disprove the work of authorities and gives its highest awards to those who do so.

9. **Occam’s Razor.** This convenient rule-of-thumb urges us when faced with two hypotheses that explain the data *equally well* to choose the simpler.

Throughout this semester we will use these tools. When you see conclusions presented by me or in the readings, ask yourself: “how else might we explain the phenomenon in question?” and “how good are the data that support the present conclusion?” That is, you should seek to determine which conclusions are based on reasoned argument and which are fraudulent. I suspect you will find that some conclusions made concerning the human diet are not based on solid science.