#  Day  Date       Topic                                      Meet the Scientist (Skype)          Assignment /Quiz      Reading/Viewing
1  Fri  Sept. 27  Course overview; longevity basics/context -- Practice                      Carey, Tuljapurkar and Wachter (2012)
2  Mon  Sept. 30  Life course; Lexis diagrams                  Dr. Ronald Lee, Demography Department, UC Berkeley (Oct 2) Writing #1; Quiz #1 Vaupel (2010)
3  Wed  Oct. 2   Life tables I: Basics                          Guest and video lectures: Instructor at international meeting in Denmark Writing #2; Quiz #2 Austad (2006)
4  Fri  Oct. 4   Life tables II: Extensions                      ---                                ---                      ---
5  Mon  Oct. 7   Circadian rhythms & aging: Joanna Chiu (UC Davis) Introduction to Demography: Joel Cohen (video) ---                                ---                      ---
6  Wed  Oct. 9   Life tables I: Basics                          Comparative biology of aging: Steve Austad (video) ---                                ---                      ---
7  Fri  Oct. 11  Mortality; cause of death                      Dr. Thomas Johnson, Molecular and Cell Biology, University of Colorado (Oct. 16) Writing #3; Quiz #3 Leslie (2008)
9  Wed  Oct. 16  Animal models: overview                       Dr. Donald Ingram (LSU), Past President, Gerontological Society of America (Oct 30) Writing #5; Quiz #5 Sierra et al. (1996)
10 Fri  Oct. 18  Animal models: selected studies                Dr. Peter Martin, Gerontology Program, Iowa State University (Nov. 6) Writing #5; Quiz #5 Sierra et al. (2009)
11 Mon  Oct. 21  Population biology of elderly                  Dr. Donald Ingram (LSU), Past President, Gerontological Society of America (Oct 30) Writing #5; Quiz #5 Sierra et al. (1996)
12 Wed  Oct. 23  Theories of aging                              Dr. Richard Suzman, Director, Div. Behav. Social Research, National Institute on Aging, NIH (TBA) Writing #4; Quiz #4 Carey (2003)
13 Fri  Oct. 25  Lifespan: concepts and overview                Dr. Donald Ingram (LSU), Past President, Gerontological Society of America (Oct 30) Writing #5; Quiz #5 Sierra et al. (1996)
14 Mon  Oct. 28  Genetics of human aging                        Dr. Peter Martin, Gerontology Program, Iowa State University (Nov. 6) Writing #5; Quiz #5 Sierra et al. (2009)
15 Wed  Oct. 30  Evolution of the human lifespan                Dr. Peter Martin, Gerontology Program, Iowa State University (Nov. 6) Writing #5; Quiz #5 Sierra et al. (2009)
16 Fri  Nov. 1   Family demography and aging                   Dr. Peter Martin, Gerontology Program, Iowa State University (Nov. 6) Writing #5; Quiz #5 Sierra et al. (2009)
<table>
<thead>
<tr>
<th>#</th>
<th>Day</th>
<th>Date</th>
<th>Topic</th>
<th>Meet the Scientist</th>
<th>Assignment/Quiz</th>
<th>Reading/Viewing</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Mon</td>
<td>Nov. 11</td>
<td><strong>HOLIDAY (Veteran’s day)</strong></td>
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<tr>
<td>21</td>
<td>Wed</td>
<td>Nov. 13</td>
<td>Theory of longevity extension</td>
<td>Dr. Maxine Weinstein, Georgetown University (Nov. 13)</td>
<td>Writing #6; Quiz #6</td>
<td>Carey and Judge (2001)</td>
</tr>
<tr>
<td>22</td>
<td>Fri</td>
<td>Nov. 15</td>
<td>The oldest old; life span limits</td>
<td></td>
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<tr>
<td>23</td>
<td>Mon</td>
<td>Nov. 18</td>
<td>Centenarians; supercentenarians</td>
<td>Dr. Leonard Hayflick, UC San Francisco; discoverer of Hayflick Limit; (Nov. 18)</td>
<td>Writing #7; Quiz #7</td>
<td>Buettner (2012); Jackson and Howe (2008);</td>
</tr>
<tr>
<td>24</td>
<td>Wed</td>
<td>Nov. 20</td>
<td>Blue Zones Project</td>
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<tr>
<td>25</td>
<td>Fri</td>
<td>Nov. 22</td>
<td>Health demography</td>
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<tr>
<td>26</td>
<td>Mon</td>
<td>Nov. 25</td>
<td>Successful aging I: Healthy habits</td>
<td>Dr. Owen Carmichael, Alzheimer’s Research Program, UC Davis (Nov. 25)</td>
<td>Quiz #8</td>
<td>Taubes (2007)</td>
</tr>
<tr>
<td>27</td>
<td>Wed</td>
<td>Nov. 27</td>
<td>Successful aging II: Strategic framework</td>
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<td></td>
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<tr>
<td>28</td>
<td>Fri</td>
<td>Nov. 29</td>
<td><strong>HOLIDAY (Thanksgiving)</strong></td>
<td></td>
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<tr>
<td>29</td>
<td>Mon</td>
<td>Dec. 2</td>
<td>Death and dying</td>
<td>Dr. John Haaga, Deputy Director, BSR, National Institute on Aging (Dec. 4)</td>
<td>Quiz #9</td>
<td>Rapport (2010)</td>
</tr>
<tr>
<td>30</td>
<td>Wed</td>
<td>Dec. 4</td>
<td>Aging nation/aging world</td>
<td></td>
<td></td>
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<tr>
<td>31</td>
<td>Fri</td>
<td>Dec. 6</td>
<td>Prospective and retrospective</td>
<td></td>
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<tr>
<td></td>
<td>Tue</td>
<td>Dec. 10</td>
<td><strong>FINAL EXAM</strong> (Exam Code G)**</td>
<td></td>
<td><strong>10:30a-12:30p (2205 Haring Hall)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**HOMEWORK**

There are two categories of homework, both due each week by midnight Sundays online.

**Quizzes**—these will be 10-point multiple choice timed quizzes that you can take twice. Questions will be taken from the week’s lecture’s, readings, and video viewings.

**Writing**—these will be short assignments that build toward your 2,500 word term paper. Points vary by assignment.

**Skype forum**—you will be required to submit an informed question each week to be asked of the scientist or administrator who will be Skyped in to the class that week. The home pages of all interviewees are hyperlinked to their name in the course syllabus.

**GRADING AND WEIGHTINGS**

- **Exams (50%)**:  
  - Midterm: 25%  
  - Final: 25%

- **Homework (25%)**:  
  - Quizzes: 10  
  - Writing: 10  
  - Skype forum: 5

- **Term paper (25%)**:  
  - 25

100%
READINGS:


VIEWING (VIDEO):


Cohen, Joel: Introduction to demography: https://www.youtube.com/watch?v=2vr44C_G0-o

WEEKLY ASSIGNMENTS (28 pts total)

<table>
<thead>
<tr>
<th>No.</th>
<th>Pts</th>
<th>Assignment Description</th>
<th>Due*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 pt</td>
<td>Pick three potential topics from the Term Paper Ideas list and submit term paper titles for each. Although you can change topics at any time during the quarter, give serious thought to which topic you choose initially since you will want to build on it in subsequent assignments.</td>
<td>Oct. 6</td>
</tr>
<tr>
<td>2</td>
<td>3 pts</td>
<td>Submit 6 primary references on one or more of the topics (or a new topic) that you identified in Assignment #1 as a possible term paper theme. These must be formatted according to formatting guidelines on p6.</td>
<td>Oct. 13</td>
</tr>
<tr>
<td>3</td>
<td>3 pts</td>
<td>Submit by attachment in WORD a single page with a formatted table with content re-typed and a graph copied (screen capture) from a paper. Both with descriptive legends and sources. Use examples in model term paper.</td>
<td>Oct. 20</td>
</tr>
<tr>
<td>4</td>
<td>4 pts</td>
<td>Submit your term paper’s preliminary structure including 4-5 main headings and at least two sections with two or more subheadings. The first heading should be Introduction and the last heading References Cited. Include all of your references in the last section and use legal numbering system for headings and subheadings i.e. 1., 1.1, 1.2……3., 3.1, 3.2, etc. Use model term paper as example.</td>
<td>Oct. 27</td>
</tr>
<tr>
<td>5</td>
<td>5 pts</td>
<td>Submit at least 5 additional references (primary, secondary, gray) in your References Cited section along with the first 50 -100 words of your paper in Introduction. Include a strong introductory first sentence.</td>
<td>Nov. 10</td>
</tr>
<tr>
<td>6</td>
<td>5 pts</td>
<td>Submit draft of your term paper with content in most sections (guideline would be 500 to 1,000 words minimum). Does not have to be grammatically polished and will be graded on working draft quality only.</td>
<td>Nov. 17</td>
</tr>
<tr>
<td>7</td>
<td>5 pts</td>
<td>Submit your complete draft with at least 2,000 words. Although the narrative will require additional editing, refining, and proofing; references should all be complete and formatted correctly.</td>
<td>Nov. 24</td>
</tr>
</tbody>
</table>

*Sunday midnight

TERM PAPER

1. **Purpose.** The purpose of the term paper is three-fold: i) to expand your knowledge about longevity in general and human lifespan in particular; ii) to learn to use the library for research; and iii) to improve your writing and editing skills.

2. **Subject.** The subject for your term paper this quarter may be any of the topics listed in the Term Paper Ideas list.

3. **Procedures.** Select a subject and write a paper in which you: i) find and review the available literature dealing with the specific subject you chose to write about; and ii) write a paper in which you describe the significance of the subject, apply appropriate techniques and concepts learned in the course and discuss the broader implications and limitations of your particular perspective or approach.

4. **Specific Requirements/due date.** The length should be 2,500 words; the due date **December 1 (Sunday midnight)**. The suggested format and organization is: i) cover Page with your name, year, major, this course; ii) main text with headings and subheadings; iii) references in style and format described on p6.

5. **Grading.** Your term paper grade will be based on: i) your organization and coverage of the topic. The limitation on length means that you will need to do a thoughtful job of selecting and organizing the material for your paper; ii) your apparent understanding of the material about which you write; iii) clarity and precision of your statements; iv) grammar and style; and v) technical aspects such as spelling and punctuation.
WRITING VIDEO PLAYLIST

http://www.lib.ucdavis.edu/dept/instruc/research/videos/

Table 1. Playlist of 13 mini-lectures “How to write a research term paper”. Total time for all video clips is 43 minutes and 35 seconds (Produced by James Carey, Sarah Perrault, and Shruti Dave, 2011).

<table>
<thead>
<tr>
<th>Video</th>
<th>Title</th>
<th>Time</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>2:27</td>
<td>Purpose for and overview of playlist</td>
</tr>
<tr>
<td></td>
<td><strong>Part I: Preparation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Word processing</td>
<td>4:09</td>
<td>Best practices and tips in word processing</td>
</tr>
<tr>
<td>3</td>
<td>Ethical writing</td>
<td>1:53</td>
<td>Plagiarism and related concepts</td>
</tr>
<tr>
<td>4</td>
<td>Citations</td>
<td>2:30</td>
<td>How to cite references in text and in bibliography</td>
</tr>
<tr>
<td>5</td>
<td>Picking a topic</td>
<td>2:41</td>
<td>How to narrow down term paper topic</td>
</tr>
<tr>
<td>6</td>
<td>Types of sources</td>
<td>4:08</td>
<td>Overview of primary and other sources</td>
</tr>
<tr>
<td>7</td>
<td>Researching</td>
<td>5:37</td>
<td>How to search for relevant literature</td>
</tr>
<tr>
<td>8</td>
<td>Plan of attack</td>
<td>4:19</td>
<td>Get organized and plan</td>
</tr>
<tr>
<td></td>
<td><strong>Part II: Writing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Stage I: Launching</td>
<td>1:30</td>
<td>Skeleton stage of paper writing</td>
</tr>
<tr>
<td>10</td>
<td>Stage II: Thoughts on paper</td>
<td>3:50</td>
<td>Getting ideas and concepts written</td>
</tr>
<tr>
<td>11</td>
<td>Stage III: Growth and development</td>
<td>3:44</td>
<td>Starting to construct paper</td>
</tr>
<tr>
<td>12</td>
<td>Stage IV: Complete working draft</td>
<td>3:04</td>
<td>Approaching next-to-final version</td>
</tr>
<tr>
<td>13</td>
<td>Stage V: Finalizing</td>
<td>3:29</td>
<td>Making perfect technically and full of content</td>
</tr>
<tr>
<td>14</td>
<td>Finished term paper (pdf)</td>
<td></td>
<td>Model term paper</td>
</tr>
</tbody>
</table>
REFERENCES

JOURNAL ARTICLE


BOOK (OR ENCYCLOPEDIA) SECTION


BOOK


EDITED BOOK


NEWSPAPER ARTICLE

pagewanted=all&_r=0

WEBSITE


GREY LITERATURE
Grey literature citations are a challenge because the documents are usually not part of a series (i.e. with volume, issue, edition), do not specify an author, publisher, or city, and contain informal and/or piecemeal information on their provenance. None-the-less, they are frequently a source of important information. The first rule of thumb in citing this literature is to present information systematically and ensure that it is complete so that readers can access the source including the URL. Check with the Help Desk at Storer Library for guidance.


Frequently Asked Questions
LONGEVITY (HDE/ENT 117)

GENERAL

1. Is there a text for this course?
No. However, there are weekly assigned readings and video viewings.

2. How can I do well (i.e. get an A) in this class?
No secrets here. Show up to class, pay attention, do the readings, attend office hours and ask questions when you are confused. We are here to help you succeed. There are also great resources here on campus including the learning skills center that offers writing workshops. And you may want to form and/or join a study group.

3. What is your typical grade distribution?
I generally give about a third A’s, B’s and (slightly fewer) C’s with residual D’s for students who made little effort and F’s for students who failed to turn in major assignments like term paper or didn’t take the exams.

LECTURE

4. Will lecture notes/slides be posted prior to class?
Yes, I will try my best to get them posted early. However, I often edit them right up to the end.

5. Is attendance required?
No. But anything presented in class including content from “Meet the Scientist” Skype interviews is fair game for quizzes and exams.

6. How can I minimize disruption if I need to leave lecture early?
Sit near the rear and discretely leave. I find it insulting to instructor and students alike when a student leaves in the middle of lecture, especially from the middle of the lecture hall.

7. May I talk to my neighbor in class?
Please do not since it is disconcerting to me lecturing. If you need to communicate, write on note pad like they do in court where everyone must remain quiet.

QUIZZES AND EXAMS

8. Why do we have weekly quizzes?
These are “high frequency-low impact” concept based on the idea that testing is part of the learning process. Quizzes by themselves count very little though they could make a difference in half a grade if you’re on the line. But by the idea of the quizzes is to prepare you for the major exams—midterm and final—that count for 50% of your course grade.

9. What are the quizzes like and what material will they be over?
They are timed, online with 10 multiple choice or true-false question each. You can take a quiz twice each week and only your highest score will count. The questions are taken from the week’s lecture, video viewing assignment, Skype interviews, and readings.

TERM PAPER

10. Can I change topics any time?
Yes. Often students find that they are not interested in the original topic they chose or the literature is not extensive enough to provide the types or depth of sources needed for a good term paper.

11. Does my topic have to be approved?
No. However, it is always useful to solicit feedback from the instructor of one of the TAs.

12. What citation style should we use?
Use the citation and bibliographic styles that I adopted from one of the scientific journals (see Term Paper Formatting Guidelines). This course-specific requirements is equivalent to a journal’s “guidelines for authors” specifying its formatting criteria for different types of sources (e.g. journal article; book; edited book; etc).
13. **Is the 2,500 word requirement a hard number?**
   No, but you need to be in the ballpark (e.g. around 2,350 minimum). In principle there is no maximum per se, but anything over 3,000 words is excessive and I wouldn’t go there.

14. **What part(s) of the term paper do I use for this word count?**
   You can use the summary and main body of the term paper. The bibliography does not count.

15. **Do you accept late papers?**
   Yes. Penalty is 10% per day with each day ending at midnight.

**INSTRUCTOR BIOSKETCH**

**JAMES CAREY** is an entomologist/population biologist in the Department of Entomology at UC Davis specializing in the biology and demography of aging, and a senior scholar in the Center for the Economics and Demography of Aging, UC Berkeley. He received his Ph.D. from UC Berkeley in 1980, joined the faculty at UC Davis that same year as an Assistant Professor and was promoted to Professor in 1992. Dr. Carey is the author of over 250 scientific publications including 11 papers or letters in *Science*. One of these was a life table study of 1.2 million medflies considered by many to be a landmark in aging research because it was one of the first studies to show definitively that mortality slows at advanced ages. He has also authored three books, the most recent of which appear last year (2003) titled *Longevity: The Biology and Demography of Life Span* (Princeton University Press). Professor Carey has served on the editorial boards of the journals in both population biology, demography and gerontology, is an ad hoc member of NIH Study Sections for both the Biology of Aging and the Behavioral and Social Science, and is a Fellow of the American Association for the Advancement of Science, the Gerontological Society of America, the California Academy of Science, and the Entomological Society of America. He teaches two large-enrollment courses including “Longevity” (HDE/ENT 117) and “Terrorism and War” (SAS 7V).
HDE/ENT 117
Term paper ideas


10. Longevity theory of Aubrey DeGrey: Why does he believe people can someday live to 5000 years?


20. The biology and ecology of the longest lived rodent: the naked mole rat.


22. The longevity of the British peerage


24. The longevity of slaves in the pre-Civil War south


27. Health 2.0, eHealth, and measuring self


29. Organ replacement and the future of longevity

30. Surviving starvation: Selection or debilitation?

31. Trans-generational effects of feast and famine on longevity


34. Anti-aging medicine: Real or fraud?

35. Does childhood health affect chronic disease incidence in adulthood?


39. Future societies and the life course


43. Human longevity and parental age at conception.
64. Point-counterpoint: would doubling the human life span be a net positive or negative for us either as individuals or as a society? 2004. *Journal of Gerontology: Biological Sciences*, 59A, 554-559.

66. What is a healthy body mass index for women in their seventies? Results from the Australian longitudinal study on women’s health. 2010. *Journal of Gerontology: Medical Sciences*, 65, 847-853.


70. What is a healthy body mass index for women in their seventies? Results from the Australian longitudinal study on women’s health. 2010. *Journal of Gerontology: Medical Sciences*, 65, 847-853.


