

Disease summaries and oral presentations

(Grading & penalties for being late are detailed on the last page)

Disease summaries:

You will need to do a disease summary. This summary should have the following structure & headings (see also the information right after the references section):

Introduction - explain in one or two sentences why you choose this disease.

Biology - list the organism/virus that causes the disease. In half a page or less, provide the following information (you may need a bit more space if you're discussing parasite life cycles in this section):

Bacteria: gram (+/-), aerobic vs. anaerobic, shape.

Viruses: type (DNA/RNA, etc.), presence of membrane, etc.

Parasites & fungi: basic shape & life cycle (you may do this as part of the pathology if it makes more sense to you).

For all of these indicate where it occurs (geographically), and, of course, give its scientific name (and a bit of the taxonomy for parasites (e.g. nematode, flat worm, etc.)).

Pathology: what does the organism/virus do? Explain what happens from the moment it enters the body (or other organism, if you picked a non-human disease) until the person either recovers, stabilizes (some diseases can become chronic), or dies. This should be about a page.

- discuss what happens to the organism/virus in the host.
- discuss the symptoms experienced by the host (and what causes the symptoms, if known).
- discuss how the disease spreads.

Treatments: what treatments are there for the disease? This should be as long as needed (but you probably shouldn't need more than half a page).

Antibiotics / antivirals / antiparasites /antifungals /etc.

Supportive treatment (e.g. rehydration, etc.)

Societal impacts: try to put some effort here. One half to a full page is probably a good thing to aim for.

Why is this disease important to society? Has it had an impact on behavior? art? science? economics? agriculture? religion? etc. Try to say more than “it kills xxxx people every year”.

References: You should have at least four references, *two* of which *must* be from books or peer reviewed scientific journals. Use the following format for references:

Please make sure you understand the rules for plagiarism - this summary must be your own work!!

For scientific journals:

Author, year published, title of reference, title of journal, volume & starting page.

For example:

Ernst, C. H. 1964. Sexual dimorphism in American *Agkistrodon* fang lengths. *Herpetologica* 20:214.

For books:

Author, year published, title, location published, publisher & # of pages in book

For example:

Ernst, C.H. & R. W. Barbour. 1989. Snakes of Eastern North America. Fairfax, Virginia: George Mason University Press. 282 pp.

For web based references:

Author (if available), year (of last modification), title of article, publisher (if known), URL.

For example:

Anon. 2008. Rattlesnake. Wikipedia. URL: <http://en.wikipedia.org/wiki/Rattlesnake>

For popular articles (newspapers, magazines, etc.):

Author, year & date, title of article, name of paper/magazine, location published, page article start on.

For example:

Kaufman, M. 2008, February 25. Plan for Telescopes on Moon's Far Side is Reviewed. *Washington Post*, Washington D.C., p. A6.

Summary of what you need to do:

Your total summary should be **3 - 4 pages long (including references)**. Let's not play games with fonts, margins, etc. Stick with 12 pt. proportional font, double spaced, 1 inch margins all around, no large spaces between sections, etc.

Do not go too far over 4 pages or you will be marked down. Seriously!

Finally, I do grade on grammar. I need to be able to read and understand your summary. So please make sure your summary is grammatically correct and readable. If you need help with this, please consult the writing center:

<https://writingcenter.gmu.edu/>

Oral presentation:

For your oral presentation you will need to present your disease to the class. I will be a member of the audience. I may ask another faculty member to join us. You should plan on about 8 - 9 minutes for your presentation and a few minutes for questions. Please try not to go longer than this - surprisingly, often the problem is talking too long rather than not long enough.

Do NOT read your report. Present your report as if you were trying to inform someone else about this disease.

You should provide graphics, summaries, photographs, tables, etc, of your disease and related topic.

You may use as many pictures/slides as you feel necessary. However, please minimize "bullet slides". They don't help much. For an example of why they're bad, see this web page:

<http://www.norvig.com/Gettysburg/index.htm>

Do NOT play more than one movie or animation, and limit it to no more than about 20 seconds. This is your talk, not that of the author of the movie or animation.

Avoid audio effects unless absolutely necessary to show something about your disease.

Be prepared to answer questions from the rest of the class.

Points will be assigned as follows:

Disease summary: 22% as follows:

Overall format & layout 5%

Content 13%

Bibliography & references 4%

Late penalties for summary:

I will subtract ½% for every day you are late in giving me a topic.

I will subtract 1% for every day you are late in giving me your summary.

Oral presentation: 10%, *approximately* as follows:

Content 5%

Visual presentation 3%

Overall presentation 2% (i.e, how well prepared you are, ability to answer questions, etc.)