AIDS: Science and Society

BICD 136 Summer 2017

<u>Instructor</u> Cindy Gustafson-Brown (Dr. Gus)

Office: Humanities and Social Sciences 1145E

Phone: 534-4242

email: cgb@ucsd.edu (Put **BICD 136** in the subject line!)

office hours: Tues 3-4 PM, HSS 1145L (no office hours during week 1)

Please present your questions about course material <u>in person</u> during office hours, not by email. I cannot guarantee an answer to your email, unless it is an urgent issue.

Course description

Introduction for biology majors to the AIDS epidemic: epidemiology, biology, and clinical aspects of HIV infection; HIV testing and therapy; and the personal, social, economic and legal impacts of AIDS on the individual and society. Recommended: BILD 1 and BILD 2.

Book

HIV/AIDS Pandemic: Origins, Science, and Global Impact, second edition ©2014 published by Cognella Academic Press, distributed by University Readers

Copies will be available on reserve at the Biomedical Library and the Geisel library.

Podcast

This course will be podcast.

Web site

The class web site will be on TED.

IA office hours

Name:	Day: Time:		Location:	
Emily Schmidt	Mon	11-noon	AP&M 3832	
Kimberly Groeniger	Tues	10-11 AM	Perks coffee (in bookstore)	
Della Syau Mon/Wed		11-noon	Muir Woods Coffeehouse	

Discussion sections

Sections will start on Thurs, Aug 10.

section	days	time	room	IA	email
A01	Tue/Thu	9-10 AM	Center 207	Kimberly Groeniger	kgroenig@ucsd.edu
A02	Tue/Thu	10-11 AM	Center 207	Emily Schmidt	eschmidt@ucsd.edu
A03	Tue/Thu	11-noon	Center 207	Emily Schmidt	eschmidt@ucsd.edu
A04	Tue/Thu	2-3 PM	HSS 2150	Della Syau	dsyau@ucsd.edu

In section you will review the lecture material and/or discuss the readings. There will also be quizzes (~15-20 minutes each) in section, as scheduled below.

YOU MAY ONLY TAKE QUIZZES IN THE SECTION YOU ARE ENROLLED IN. You may NOT take a quiz in another section.

Tues, Aug 8	no section	
Thurs, Aug 10	Thurs, Aug 10 quiz 1 on reading: pages 3-10, 15-36, 95-106, 117-130 2 documents on TED in "global impact" folder	
Tues, Aug 15	quiz 2 on reading: pages 51-54, 69-77, 131-174 and 1 document on TED in "US statistics" folder	(21 pts)
Thurs, Aug 17	quiz 3 on reading: pages 175-226	(18 pts)
Tues, Aug 22	quiz 4 on reading: pages 229-243	(12 pts)
Thurs, Aug 24	quiz 5 on HIV structure	(45 pts)
Tues, Aug 29	quiz 6 on HIV life cycle	(45 pts)
Thurs, Aug 31	quiz 7 on reading: pages 267-307, 331-352	(22 pts)
Tues, Sept 5	quiz 8 on reading: pages 353-422	(24 pts)
Thurs, Sept 7	quiz 9 on reading: pages 423-474	(20 pts)

Note: The pages corresponding to each quiz do not perfectly match up with the reading schedule for the lecture. (The quiz schedule is more lenient, in order to cover somewhat equivalent amounts of the reading on each quiz.) However, you should still keep pace with the lecture reading schedule (on the last page of the syllabus).

<u>Films</u>

There is a "Films" page on the course web site, with outside links to some of the films. There is also a link to the UCSD library reserves. Several films will be available for viewing through the UCSD library digital reserves. Others can be accessed directly through the internet.

In order to access UCSD digital reserves, you must be within the UCSD protected network or use a VPN. There is a link on the "Films" page of the class web site with instructions for setting up a VPN.

<u>How to study the films:</u> The midterm and final exam will test you on material from the films. You should take notes when you watch them, and review your notes before the exams. Do <u>NOT</u> worry about exact dates, numbers or statistics in the films. Instead, focus on the stories, history (major events and general time frame), prominent persons, policy issues, causes of the spread of the epidemic, impact of the epidemic, responses to the epidemic, etc. For each part, or chapter, of the story you should be able to say something intelligent about what the message was. What did the film maker want to communicate; what did they want you to get out of the film? There are old exams posted, on which you can see examples of film/reading questions from previous quarters.

Required films:

- 1. A Closer Walk (2003) 80 min (shown in lecture Wed, Aug 9) Profiles the impact of the AIDS epidemic in many countries.
- 2. The Age of AIDS (2006) 4 hours History of the epidemic, in the U.S. and abroad. www.pbs.org/wgbh/pages/frontline/aids/
- 3. Endgame AIDS in Black America (2012) 2 hours
 Describes the impact of HIV/AIDS on African-Americans.
 http://www.pbs.org/wgbh/pages/frontline/endgame-aids-in-black-america/
 (This film is **not** available through UCSD library. Access PBS directly.)
- 4. Dealing with the Demon, part 3 (1997) 50 min Preventing the spread of HIV among IV drug users.
- 5. The End of AIDS (2016) 60 min
 A series of six segments on HIV prevention and treatment around the world.

 http://www.pbs.org/newshour/features/end-of-aids/
 (This film is **not** available through UCSD library. Access PBS directly.)

covered on the midterm

> covered on the final exam

Optional films, available either through UCSD digital reserves, or online elsewhere:

- 6. *AIDS in Africa* (2000) 55 min

 Describes the impact of the AIDS epidemic in Zimbabwe.
- 7. And the Band Played On (1993) 140 min
 Dramatic depiction of early history of the AIDS epidemic.
 https://vimeo.com/85778803
- 8. A Time of AIDS (1992)

Part 1: The Zero Factor 1 hour

Early AIDS epidemiology, as the CDC tried to discern the nature of this new disease

Part 2: The Hunt for the Virus 1 hour

Follows the scientific detective story to discover the virus that causes AIDS

- 9. *A.B.C. Africa* (2005) (140 minutes)

 Documents the plight of AIDS orphans in Africa.
- 10. State of Denial (2003) 80 min
 The grass-roots struggle in South Africa for access to ARV's
- 11. Blood of Yingzhou District (2006) 40 min Documentary on the AIDS epidemic in rural China
- 12. The Lazarus Effect (2010) 32 min

 The positive impact of free antiretroviral therapy on HIV/AIDS patients in Africa

 http://www.youtube.com/watch?v=116YH6xCN4c&playnext_from=TL&videos=9MDIVW

 aMB7g&feature=featured

Exams

Exams and quizzes will be closed-notes/closed-book, primarily short answer with a few true/false, multiple choice, and short essay questions. You will be accountable for all material covered in lecture, PowerPoint slides, handouts, and all required reading.

There will be exam questions pertaining to the **required films**. There will <u>not</u> be exam questions about presentations by HIV-positive guest speakers.

The final exam will be comprehensive for the **lecture** material, with emphasis on the last part of the course. The final exam will not cover readings/films from before the midterm.

BRING STUDENT ID. It will be checked at the exam.

You must write in nonerasable pen and avoid using white-out on the midterm in order to be considered for a regrade. Your handwriting must be legible; we will disregard answers which cannot be deciphered.

Old exams are posted on the course web site. **Review sheets** will be posted on the web site shortly before each exam, and the IAs will conduct a **review session** before each exam:

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1<sup>st</sup> review sessions Sun, Aug 20, 7-8:30
2<sup>nd</sup> review session Thurs, Sept 7, 7-9 PM
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Graded midterms will be available in the hallway of HSS 1145 (if you sign the waiver). Note that the external doors are locked after business hours. Graded final exams may be viewed by appointment with Dr. Gus, but may not be taken home.

Missed exam or quiz

There are NO alternate exams. Make sure your class schedule has NO exam conflicts, including the final exam! Further, all students must take their reading quizzes in the section in which they are enrolled, unless receiving prior authorization from Dr. Gus.

If you know in advance must miss an exam or quiz due to an unavoidable situation (e.g. surgery), it is your responsibility to clear it with Dr. Gus as soon as the conflict becomes apparent. If a spontaneous emergency (e.g. serious illness or accident) arises, you **must contact the instructor within 24 hours** of the missed exam to determine if you are eligible for a make-up exam. You will be required to provide documentation, without which there will not be a make-up, and you will receive a zero for that exam/quiz. Do not ask to reschedule an exam or quiz for any reason other than a *dire emergency*. Make-up exams/quizzes are decided case-by-case. The format *may* be an oral or essay exam.

Course grade

This course will be graded on a curve. The class average will be a B-. Grades will include pluses and minuses.

1%	10 points	Quiz on syllabus & regrade policy (due Mon, Aug 7, 11:59 PM)
2%	18 points	Attendance when special speakers come to class (last day)
23%	230 points	Quizzes
25%	252 points	Midterm
49%	490 points	Final exam

How can I succeed in BICD 136?

- 1. **Read** the assigned pages <u>before</u> lecture. You will understand the lectures better and learn more. The lecture will be related to the assigned reading, but will expand on the topic. Nevertheless, you are accountable for <u>all</u> reading. It will be covered on the exams and quizzes.
 - **Keep up with the reading**. Pace yourself with the reading schedule. If you bump into material that is too technically challenging, *don't get bogged down*. Skip it (temporarily). Return to the most difficult material later.
- 2. **Outline** the important points as you read. This will help you remember the flow of information and contextualize the details. You will <u>not</u> remember all the reading unless you take notes. Use index cards, or a notebook, to summarize the important points.
- 3. Look up words you don't understand in the glossary, a dictionary, or online.
- 4. **Come** to class and sit toward the front.
- 5. **Listen** to the podcast.
- 6. **Review** your notes within 24 hours of the lecture.
 - Even more effective: rewrite (outline) your notes within 24 hour of the lecture.
 - There will be material presented in lecture that is not in the textbook. You are accountable for all lecture material.
- 7. **Review** the PowerPoint slides with your lecture notes. PowerPoint slides will NOT contain the instructor's notes. They will contain announcements, illustrations, graphs, diagrams, and photos which augment the lecture. They will be posted <u>after</u> each lecture. You are accountable for everything in the PowerPoint slides.
- 8. **Study** a little bit every day, or a few times per week. <u>Repetition over time</u> is the key to retaining information. Your goal is to establish new neural pathways in your memory and fire them often! Cramming does not accomplish this.
- 9. **Study** with other students, and choose those who are serious about academics. Make up questions and quiz each other. Anticipate potential exam questions. This is a strategy that has been demonstrated to increase student learning.
- 10. **Take notes** during the films. If you have time, you may watch a film twice!
- 11. **Go** to your discussion section. The quizzes there are worth 23% of your grade. Further, there will be opportunities to review the material and ask questions.
- 12. **Go** to the office hours of the IAs and the instructor. This will encourage you to review the material, in order to have questions to discuss.
- 13. **Go** to the review sessions.
- 14. Utilize **study aids** provided on the course web site.
- 15. If you are having personal difficulties, do not hesitate to seek help at Counseling and Psychological Services (which is free to students). They can help you get over many types of hurdles. http://caps.ucsd.edu/

Their self-help library of resources covers many relevant topics, and can be accessed at http://caps.ucsd.edu/selfhelp.html

Academic integrity

Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Cheating will not be tolerated, and I may fail any student caught engaging in academic dishonesty. All exams/quizzes will be closed-book and closed-notes, so all personal materials must be stowed under your seat. Only exams/quizzes written in nonerasable pen will be considered for regrades. Exams will be photocopied for comparison with submitted regrades. Because all exams/quizzes are required for satisfactory completion of this course, any student caught cheating on an exam/quiz may receive a failing grade for the course. He/she may also be suspended from UCSD.

Lecture/reading schedule on next page →

Tentative lecture schedule

Date	Session	Topics	Required reading	pages
Mon, Aug 7	1	Introduction; Why does AIDS matter?	3-10, 15-36	24
Tues, Aug 8	2	Global impact	95-106, 117-130 see TED	30
Wed, Aug 9	3	film: A Closer Walk	131-152	16
Thurs, Aug 10	4	Statistical overview of AIDS epidemic	51-54, 69-77 see TED	16
Mon, Aug 14	5	Modern history of the AIDS epidemic	155-164	8
Tues, Aug 15	6	Epidemiology, Origin of HIV	167-191	18
Wed, Aug 16	7	Origin of HIV	193-205	12
Thurs, Aug 17	8	Does HIV cause AIDS?	209-226	17
Mon, Aug 21	9	MIDTERM		
Tues, Aug 22	10	The Immune System	229-243	12
Wed, Aug 23	11	Biology of HIV	247-260	14
Thurs, Aug 24	12	Biology of HIV	261-264	4
Mon, Aug 28	13	HIV testing	267-272	6
Tues, Aug 29	14	HIV transmission/Prevention	275-307, 331-340	35
Wed, Aug 30	15	HIV transmission/Prevention	341-378	30
Thurs, Aug 31	16	AIDS disease process	379-422	38
Tues, Sept 5	17	AIDS disease process HIV therapies	423-448	20
Wed, Sept 6	18	HIV therapies	449-474	25
Thurs, Sept 7	19	Guest speakers		
Fri, Sept 8		FINAL EXAM (11:30A – 2:30PM)		

This reading schedule indicates the portions of the book that correspond to each lecture. It is a *suggested* reading schedule to help you stay on track with the lecture topics and finish all the readings in a timely manner. All assigned reading will be covered on section quizzes and on the exams, even if it is not reiterated in lecture.

On average, there are 65 pages of reading per week during summer session. Plan ahead and pace yourself.

When reading material dense with numbers (e.g. statistics) do NOT focus on learning the numbers! You will be hopelessly bogged down. Instead, focus on the <u>trends</u>. Think about what the numbers are telling you about what is happening in the world.

Numbers given in <u>lecture</u> will be the most current data and will supersede numbers in the <u>reading</u>. (Published material is always out of date by the time it goes to the printer!)