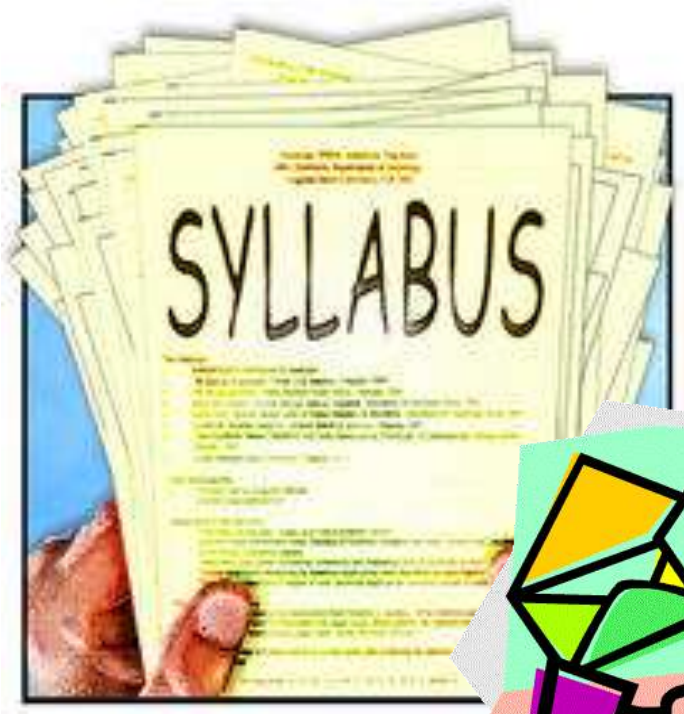


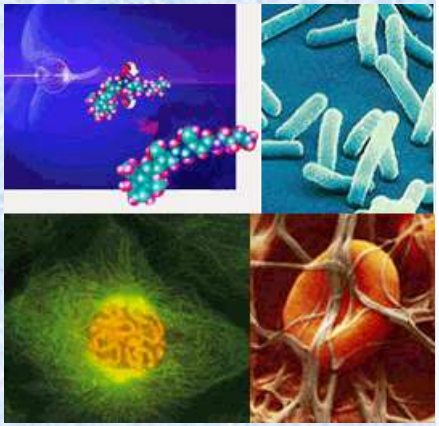
BIOL 3901

Seminar I

Fall 2013

M01

Professor's Contact Info



Dr. Brian Hilker Office: 313 Fugitte

Office Hours posted on my door or by appointment.

Desire that you use email hilkerb@lindsey.edu for most communication not conducted in person.

LWC Ph = 270-384-7347.

ALL COMMUNICATIONS FOR THIS COURSE *SHOULD* BE PURSUED THROUGH YOUR LWC CAMPUS EMAIL

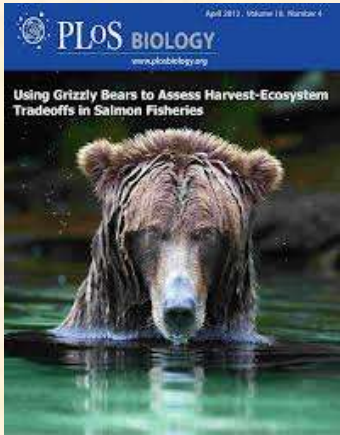
Course Goals:

3901 - Seminar I - 1 credit hour

- A study of current literature in a selected biology topic of a student's interest. Readings selected and discussed will provide the basis for research in senior seminar (BIOL 4901). ***Prerequisites:*** Junior standing in the Biology Program.

*This course prepares candidates for the Bachelor of Science in Biology Education degree with the knowledge base required in the Kentucky Core Academic Standards and the College Career Readiness Standards. The Conceptual Framework of the Education Program, "Teacher as Leader for the 21st Century", is incorporated. The Division of Natural and Behavioral Science works with the Education Program in preparing teacher candidates with the knowledge base required to meet Kentucky Teacher Standard I and the Education Program's Student Learning Outcome for Content Knowledge. Teacher candidates will be equipped to teach K-12 students and meet requirements for Unbridled Learning.

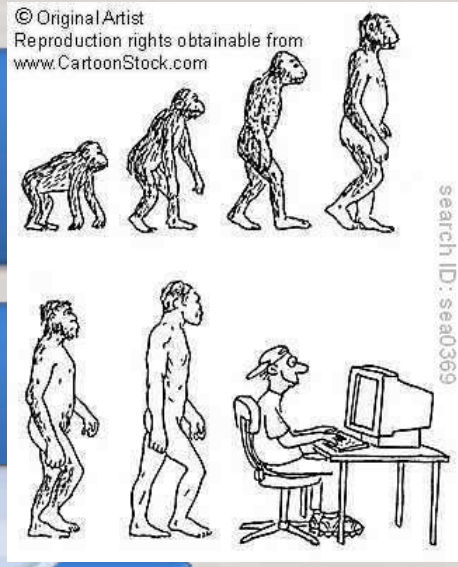
2012-2013 version White Book Listing



Overview of Course

- This course is designed to hone your scientific literacy and critical thinking skills. You will learn how to search the 'primary' literature in biology, how to read and critique research papers and the data contained therein, and how to synthesize findings across multiple papers on the same topic.
- Student presentations are a MAJOR component of this course. Each student will give two slide presentations prepared using PowerPoint; or a related type of presentation software, during the semester.
  - The first, shorter (10 minute), presentation focuses on a single paper from a topic area that is being considered for more detailed investigation. This presentation, graded on a pass-fail basis (think 'LOW stress'), will help to get your feet wet, both in terms of the technical aspects of preparing PowerPoint slides and also in terms of your level of comfort describing and critiquing biology research.
  - The second presentations, combining data from three separate research papers, will be given at the conclusion of the semester. You are expected to clearly explain each research paper (experimental design, methodology, and main findings), to relate the different papers to one another as well as to the overall topic area, to critically analyze and interpret the research, and to provide meaningful answers to questions from the audience; demonstrating a level of mastery of the topic area. These final 'literature review' presentations, which account for nearly 50% of your grade, may be videotaped and used to assess the Biology Department Student Learning Outcome 4.1 (Communication in an Acceptable Scientific Manner, See Below).
- This course also includes a peer evaluation component. To earn a high grade you need be organized, self-motivated, and willing to invest time to work on your seminar on regular basis during the semester (See the 'Timeline' section of the syllabus).

Cumulative Basic **Science** Skills Developed



Searching The Literature

- 1° and 2°

Experimental Design

- Types of research methods

Simple Applied Statistics

- Interpret research claims

Your own practice searching, assimilating, and presenting research papers

Evolving

Course Goals: Target PROGRAM Learning Outcomes

1	Describe the differences between the primary and secondary literature in biology, and also between meta-analyses and more traditional review papers. They will be able to identify each type of paper (primary, secondary, or meta-analysis) by reading the abstract.
2	Explain the process of peer-review in the natural sciences. This includes knowing where to look at in a paper to find information about the author affiliations, funding sources (if any), and the time required for review; as well as the conventions used for ordering the author names.
3	Perform focused and effective literature searches using popular journal article databases, such as Google Scholar and Medline. Students will be able to refine their search strategies to identify, and follow, distinct lines of research within the topic area. By reading the abstract students should be able to identify papers that are especially pertinent and/or innovative.

Course Goals: Target PROGRAM Learning Outcomes

4	Describe and critique the experimental design and data analysis components of a research. Students should be able to identify the major types of variables in the research (independent, dependent, extraneous) as well as common experimental design flaws, such as a lack of 'control', confounding, and insufficient replication. Students will also be familiar with the basic process of hypothesis testing in statistics. This includes knowing what 'p values' are and how they are used to make an objective decisions about whether the null hypothesis should be accepted or rejected. Students should be able to make statements about the quality of the data (strength of evidence) as a function of the experimental design and research execution. They should be able to critically evaluate graphs and figures and to assess whether the interpretations and conclusions of the authors are appropriate for the data.
5	Synthesize and organize research findings across multiple papers and to place these findings into a 'larger' context to tell a coherent story. Students will share what they have learned with others in the class both in written form, as an abstract, and orally as a slide presentation prepared using Powerpoint or similar software. The oral presentations, should well organized and clearly and enthusiastically communicated with effective visual aids.
6	Thoughtfully evaluate the presentations of their peers; providing honest, constructive feedback

Class meeting Time(s)

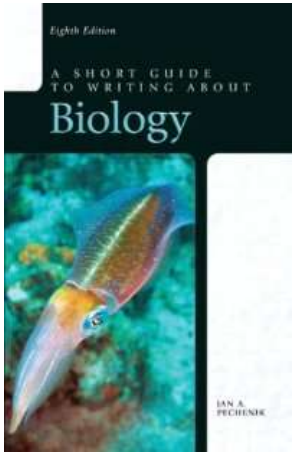
Lectures in Fugitte 214

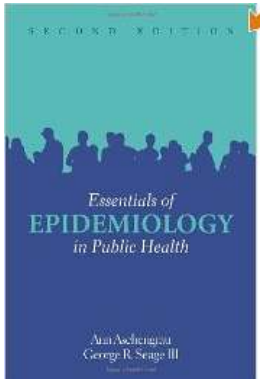
- 330-445 M (M01)

NO Labs

- Just practice searching, presentation preparation, and presenting

Required Text(s)





Textbooks:

- Gillen, CM. 2007. Reading the Primary Literature. Pearson Benjamin Cummings Publishing. ISBN: 9780805345995
- Pechenik, JA. 2012. A Short Guide to Writing about Biology, 8th Edition. Pearson Longman Publishers. ISBN: 9780205075072

Supplemental Readings: *(pdf's provided of needed pages)*

- MacMillan,V. 2012. Writing Papers in the Biological Sciences, 5th Edition. Bedford/St. Martin's Press, Boston, MA. ISBN: 0312649711
- Aschengrau, A. and Seague GR. 2008. Essential of Epidemiology in Public Health. Second Edition. Jones and Bartlett Publishers, Boston, MA. ISBN: 076374025X

LWC ISLO and Signature Assignment(s) for Assessment

- For **common** General Education Breadth and Depth
- Uses ISLO Oral Communication Rubric for assessment

Signature assignment for BIOL 3901 involves a detailed:

- The first, shorter (10 minute), presentation focuses on a single paper from a topic area that is being considered for more detailed investigation---as practice
- The second (ISLO) presentations, combining data from three separate research papers, will be given at the conclusion of the semester. Students are expected to clearly explain each research paper (experimental design, methodology, and main findings), to relate the different papers to one another as well as to the overall topic area, to critically analyze and interpret the research, and to provide meaningful answers to questions from the audience; demonstrating a level of mastery of the topic area.

Grading Overview

(updated frequently in Blackboard)

pts. per item	~ % of course grade	Details of Assignment/Task
30 (3 x 10)	6.5%	Directed Reading Question Homeworks
50 (2 x 25)	10.5%	Literature Search Homeworks
25	5.5%	Statistics Homeworks
25	5.5%	Statistics and Experimental Design Quiz (administered outside of class mid-semester)
40 (2 x 20)	8.0%	Paper Evaluation Homework
30	7.0%	Paper Presentation #1 (Pass/Fail)
20	**4.0%**	Topic Presentation Abstract
200	**42.5%**	Topic Presentation #2 (end of semester)
30	**6.5%**	Preparation and Deadlines
20	4.0%	Peer Evaluations
470 points		**TOTAL**

Attendance

- Since this is a discussion-based class, attendance is especially important. Attendance records will be kept and students who have perfect attendance (no unexcused absences) will be awarded 10 bonus points for the semester.
- Students with unexcused absences will be assigned *MINIMUM* deductions of ~3% (15 pts) for EACH absence.
- **Students with four or more unexcused absences will Automatically FAIL this the course.**

- LWC Excused absences include those resulting from illness, medical emergency, or approved extracurricular activities (athletics, choir, class field trips, etc.) as long as documentation is provided, such as an e-mail letter from a coach or a doctor's note. Students who can also obtain documentation of illness through the school nurse, Kay Gaines, in the Blue Raider Sports Medicine Center (Phillips Basement, 384-8238). **Advance notification should be provided for all absences known about prior to the day of class.** Work must still be made up quickly---e.g.: HW is due one day late if one day of Excused Absence!

- Any HW or other assignment that is late will receive AT LEAST a 10% penalty ***per day*** for being late.
  - NOTE: 5 min. late = 1 full day on due date
- Each subsequent late assignment receives at least a 20% grading penalty ***per day*** and so forth.

Paper Presentation #1

- Based on the primary literature search assignment you will identify a single peer-reviewed paper to present to the class.
- Your presentation (10-12 minutes long) should include all of the following components; a title slide with the full bibliographic information, a research objectives statement, a description of the experimental design, materials, and methods employed; an overview of the main results, as evaluated using at least three tables or figures from the paper, and a discussion of the data interpretations offered by the authors.
- Your presentations should also include **evidence of your critical analysis** of the research. The products of such an analysis would generally take the form of criticisms of the research itself (design, interpretations, etc.) or the writing.
- However, thoughtful discussions of unexpected or unusual results that merit further consideration may be more appropriate. These presentations will ensure that you have started the process of delineating a topic at an early point in the semester and will provide you with important feedback.
- **Graded on a 30 point grading scale---mostly Pass/Fail with Rubric items**

Literature Review
(Topic) Presentation: 40+% course grade

- Your final presentation should be 15-20 minutes long, followed by a 5-10 minute question and answer period. Your presentation should include data from three papers on the same topic.
  - The papers should be contemporary (See the 'Timeline' section for more details) and significant within the research field. Thus, the selection of the specific papers evaluated is an important part of the overall process and deserves careful consideration. The same applies within each paper.
  - Because of the time limits on your seminars you cannot present all of the data from each paper and will need to decide which subsets of data are most relevant to overall topic. Grades will be assigned based on a variety of criteria including delivery (articulation and projection, eye contact, etc.) and visual aids, but the greatest weight will be placed on the content and clarity of your presentation and the degree of mastery of the material demonstrated.
- As you plan your presentation it may be helpful to think of yourself as our 'tour guide'.
- For each paper, you should be able to clearly and succinctly explain the experimental design and research methods relevant to the data that you will be sharing with us. Tell us what are the most important results, highlighting patterns within the data and indicating whether the differences seen were statistically, or biologically, significant. The words used should be your own, NOT those of the authors. The interpretations and conclusions of the authors are important, but should not be accepted blindly.
- You should evaluate the data in detail ON YOUR OWN, as demonstrated by Pechinek (pp. 37-41) and thus should be able to assess the degree to which the assertions of the authors supported by the data? Did the authors ignore data that fails to support their conjectures? Are they overlooking extraneous variables? You should be able to draw connections between the different papers and to present the material in a logical order to tell a **consistent story**, to suggest directions for future research, and to answer questions from the instructor and other students in the class. In addition, even though time is short, do not neglect to include an introduction to the overall topic area.
  - Your presentations may be videotaped to document my assessment scores. The recordings may also be used for teaching purposes with future groups of students in the class.

Powerpoint Slides

- The preparation of the slides for your presentations will require significant amounts of time and thought---SO START EARLY!
- The slides showing the research data, the heart of the presentation, should be your first priority. However, for all but the shortest research papers, the amount of data will be too extensive to present in its entirety and you will have to pick and choose which data are most the most important for your overall presentation.
- For papers that are available online, as *pdf* or *html* files, the tables and graphs can generally be copied and pasted into Powerpoint. However, for papers obtained through interlibrary loan you will need to scan the tables or figures and save them as image files to be inserted into your slides. Flatbed scanners are available in the library as well as in my research lab.
  - If the tables or figures from the paper are especially large (data heavy) you may want to create pared down versions retaining only the most essential data that are more appropriate for inclusion in a slide presentation. In other cases the tables and figures may be fine, but you may want to annotate them with symbols or color coding, to highlight specific data points or trends.
  - If photographs or other images from the Internet are included in your presentation you should make sure that they are not copyright protected (this is generally indicated at the bottom of the page with the photograph) and should include the URL of the website that the image(s) were obtained from in small font below the image. Public domain image libraries are available through Wikimedia at http://commons.wikimedia.org/wiki/Main_Page.

Research Abstract and References

- Abstracts are required for the literature review presentations. The abstracts (200-300 words long) should provide an introduction to the overall topic and also to the specific research papers that will be evaluated.
- As is typical for science writing the abstracts should be written in past tense and passive voice, avoiding the use of personal pronouns. Full references for each of the papers that you will discuss should be provided below the abstract using the formatting guidelines described by Pechinek (pp. 80-82), based on conventions established by the APA (American Psychological Association)

Peer Evaluation (Topic Presentations)

- With the exception of the class period when you give your own presentation, you are expected provide evaluations of the talks prepared by your peers using a standard rubric that will be passed out in class.
- The comments and numeric feedback that you provide will be compiled and shared with the other students, but I will retain your handwritten forms to ensure confidentially.
- The goals of this assignment are two-fold:
  - 1) to provide your classmates with constructive criticism and encouragement, and
  - 2) to help you to become a more effective listener and presenter.
- This exercise is especially important for students who considering careers in science research, since peer review is an important part of the service scientists are expected to provide to their profession as well as a courtesy to their academic colleagues and coworkers.
  - Your evaluations should be thoughtful and honest. For each presentation, both strong and weak points should be indentified and meaningful written comments should be provided. Giving each of your classmates only top scores (10/10) and "Good Job!" comments, is a cop-out that doesn't benefit you or them.

Interlibrary Loan

- Research papers published in journals that do not provide open access, at least for the specific articles that are of interest to you, can be obtained through interlibrary loan.
  - However, before submitting an interlibrary loan request, search for the article on the open internet using the title of the article, in parentheses, as the search term. The paper may be available in .pdf form from the webpages of the one or more of the authors or their academic departments in the case of papers authored by university faculty.
- Interlibrary loan requests are processed by Kim Hamlett. Requests can be submitted online (http://www.lindsey.edu/forms/library/ill/index.cfm), via email (ill@lindsey.edu) or by contacting with Kim directly (382-8253, hamlettk@lindsey.edu).
- At a minimum, Kim needs the following information; the author names, journal name, volume number (or year of publication), and the page numbers. Most requests are filled within 7-10 days, but up to three weeks may be required for articles that are not available from colleges/universities in the region. E-mail notifications will be sent when the articles are available for pickup

TENTATIVE DAILY/WEEKLY PLAN

	Fall	2013					
						MWF - 42 DAYS @ 50 MINUTES + 120 MINUTE EXAM = 44.4 CONTAC	
75 Min					class #	M only = 14 Days @ 75min	
Class #		2013	day		completed		
0-FR	W-R	Aug	14-15	Faculty Retreats			
0-Advi	M-T	Aug	19-20	Advising appointments: Fresh/ Upperclass			
						Content/(HW due*)	**Readings for NEXT class**
	W	Aug	21	**1st day classes**			
1	M	Aug	26			Course Introduction	Gillen, Section 3 (pp 7-13)
						Sample Paper Abstracts reviewed	
						Lit HW #1 Secondary Literature [09/03]	
						Reading HW# 1 Searching the Literature [09/03]	
Holiday	M	Sept	2	**Labor Day Holiday**			
2	M	Sept	9			Meet at the Computer Lab in the Library	Gillen, Section 2 (pp 3-6)
						Lit HW #2 Primary Literature [09/16]	Pechinek, Ch 2 (pp 21-28)
						Reading HW #2 Experimental Design [09/16]	
3	M	Sept	16			Experimental Design	Gillen, Section 5 (pp 20-28)
							Aschengrau and Seage, (pp. 135-151)
						Reading HW #3: Statistics Reading Assignment [09/23]	
4	M	Sept	23			Data Analysis and Statistics	Gillen, Section 6 (pp 29-37)
							Pechenik, Ch. 4 (pp 49-68)
						Calc HW #1: Statistics Calculations [10/04]	MacMillan (pp. 32-28)
5	M	Sept	30			Data Analysis and Statistics, cont'd	
						Paper Evaluation #1 [10/07]	
6	M	Oct	7			Paper Evaluation #1 - Discussion	Pechinek, Ch. 3 (pp 34-48)
50 Min					class #		
Class #		2013	day		completed		
	M	Oct	14	Fall Break, mid term grades due 11AM			
	W	Oct	16	Fall Break			
	F	Oct	18	Fall Break			

Daily Plan for 1st ½ of this course

Daily Plan for 2nd ½ of this course

Class #		2013	day	completed		
	M	Oct	14	Fall Break, mid term grades due 11AM		
	W	Oct	16	Fall Break		
	F	Oct	18	Fall Break		
7	M	Oct	21		Designing Effective Oral Presentations	Pechinek, Ch. 11 (pp. 232-242)
					Paper Presentations	
					Paper Evaluation #2 [10/28]	
8	M	Oct	28		Paper Evaluation #2 - Discussion	
9	M	Nov	4		Individual Work – No Class: unless otherwise needed by Prof	
10	M	Nov	11	**last day to drop/WD**	Individual Work – No Class: unless otherwise needed by Prof	
11	M	Nov	18		Individual Work – No Class: unless otherwise needed by Prof	
12	M	Nov	25		**Topic Presentations**	
Holiday	R	Nov	28	**T-Giving Day Holiday**		
Holiday	F	Nov	29	**T-Giving Day Holiday**		
13	M	Dec	2		**Topic Presentations**	
	F	Dec	6	Last day classes		
	M	Dec	9	Final Exams		
	T	Dec	10	Final Exams		
	W	Dec	11	Final Exams		
	R	Dec	12	Final Exams		
	F	Dec	13	Final Exams	Section #1: 330M = F 11AM-130PM	
					Finals: Class Review and Evaluation (Friday 5/10, 11 a.m.-1:30 p.m.)	
					overflow time (IF NEEDED)	
	Sa	Dec	14	Commencement		
	M	Dec	16	All Final Grades Due		

* Denotes homework assignments, with due dates indicated in brackets.

PRESENTATION PREPARATION TIMELINE

Task	
Literature Search (Primary Literature)	23-Sep
Journal Article Selected for Paper Presentation*	7-Oct
Research Topic Selection**[1]	11-Nov
Interlibrary Loan Requests Submitted[2]	11-Nov
Final Paper Selection for Topic Presentation*[3]	3 weeks before presentation
Topic Presentation Outline	2 weeks before presentation
PowerPoint Draft	1 week before presentation
Presentation Title and Abstract, PowerPoint Slides	Monday of presentation week

[1] Your research topic should fall within the field of biology with two possible exceptions; 1) students who are dual majors may give seminars on topics interdisciplinary with their second major and 2) students considering careers in environmental science may be choose a topic related to this interest. You should send me a list of papers that you are considering to evaluate for the presentation.

[2] Journal articles that are not available online, or in print form at the library, can be obtained through interlibrary loan. Instructions for preparing Interlibrary loan requests are provided in the syllabus

[3] After reading a variety of papers on the topic being evaluated you will need to select three to include in your presentation per the following stipulations; 1) all three must be full length, peer-reviewed research papers or meta-analyses, 2) at least two of three have been published in the last eight years (2004-) unless you can provide compelling justification for including older research in your seminar, 3) only two can be meta-analyses or publications from the same research group, and 4) at least one of the papers must have a 'basic research' component, all three cannot be clinical studies.

Copies of the papers used for your presentations should be provided to me either in electronic or print form. These are due a week before your topic presentation) for your paper presentations. You should also provide me with copies of the slides used in your final (literature review) presentation, preferably downloaded onto the classroom computer

LWC Boilerplate '12-'13 version (1)

LINDSEY WILSON COLLEGE
STATEMENTS FOR INCLUSION IN THE SYLLABUS
2013-2012

Academic Integrity
Academic integrity is essential to the existence of an academic community. Every student is responsible for fostering a culture of academic honesty, and for maintaining the integrity and academic reputation of Lindsey Wilson College. Maintaining a culture that supports learning and growth requires that each student make a commitment to the fundamental academic values: honesty, integrity, responsibility, trust, respect for self and others, fairness and justice.

To foster commitment to academic integrity, faculty are asked to require each student to place and sign the following Honor Code on tests, exams and other assignments as appropriate: **On my honor as a student, I have neither given nor received any unauthorized aid on this assignment/exam.**

Violations of the academic integrity policy include cheating, plagiarism or lying about academic matters. Plagiarism is defined as any use of another writer's words, concepts, or sequence of ideas without acknowledging that writer by the use of proper documentation. Not only the direct quotation of another writer's words, but also any paraphrase or summary of another writer's concepts or ideas without documentation is plagiarizing that writer's materials. Academic dishonesty is a profoundly serious offense because it involved an act of fraud that jeopardizes genuine efforts by faculty and students to teach and learn together. It is not tolerated at Lindsey Wilson College.

Students who are determined to have plagiarized an assignment or otherwise cheated in their academic work or examinations may expect an "F" for the activity in question or an "F" for the course, at the discretion of the instructor. All incidents of cheating or plagiarism are reported by the instructor to the Academic Affairs Office along with copies of all relevant materials. Each instance of cheating or plagiarism is counted separately. A student who cheats or plagiarizes in two assignments or tests during the same semester will be deemed guilty of two offenses. If the evidence is unclear, or if a second offense occurs, the VP for Academic Affairs or Associate Dean will work in cooperation with the Dean of Students to move the student before the campus Judicial Board for review. Violations will ordinarily result in disciplinary suspension or expulsion from the College, depending on the severity of the violation involved. **Note:** The College has purchased Turnitin.com, a web product used to detect plagiarized documents.

Questioning a Grade -- The Student Academic Complaint Policy
A student, who wishes to question **an assignment grade, or other academic issue**, should follow the procedure below:

1. Whenever possible, the student will first go to the faculty member who has assigned the disputed grade. Complaints regarding grades should be made within seven (7) days of receipt of the disputed grade and, if possible, will be decided by the faculty member within seven (7) days of receipt. If the disputed grade is the final grade for the course, "receipt" is defined by when the final grade is posted online by the registrar. (Please refer to the next section for appealing a final grade.)

2. Unless there are extenuating circumstances, the student may, within seven (7) days request in writing a review of such decision by the Chair of the division in which the grade was assigned. Upon receipt of such request, that Chair will direct the faculty member and the student to each submit, within seven (7) days, if possible, a written account of the incident, providing specific information as to the nature of the dispute.
3. Upon receipt of these written accounts, the Chair will meet, if possible, within seven (7) days with the faculty member and the student in an effort to resolve the dispute and will render his or her decision in writing.

LWC Boilerplate ’12-’13 version (2)

4. If either the student or the faculty member desires to appeal the decision of the Division Chair, the student or faculty member may, within seven (7) days by written request to the chair, ask that the matter be reviewed by a Grade Appeals Panel convened by the Academic Affairs Office.

5. If the disputed grade is assigned at the end of a fall or spring semester and the student and faculty member cannot meet to resolve the issue, the student should contact the faculty member by e-mail within seven (7) days of receipt of the disputed grade. If the issue cannot be resolved by e-mail within the time limit, steps 2, 3 and 4 of the appeal may extend into the beginning of the semester immediately following receipt of the disputed grade by following the timeline above.

A student who wishes to question a **final grade** should follow the procedure below:

1. Confer with the faculty member who assigned the disputed grade.

2. If the disputed grade cannot be resolved, a written request for a grade appeal must be submitted to the Academic Affairs Office before the first day of the semester following the one in which the grade was issued. The written request must include the specific basis for the appeal.

3. The Academic Affairs Office will convene a Grade Appeals Panel, comprised of the Vice President for Academic Affairs, the Associate Academic Dean, and the chair of the academic unit which houses the course for which the grade is appealed. If one of the members is the faculty member who issued the grade, an alternate will be appointed. The student and the faculty member may appear separately before the panel to explain their positions. The hearing is non-adversarial. Neither the faculty member nor the student may be accompanied by other individuals to the meeting of the Grade Appeals Panel. The Grade Appeals Panel will notify the student of its decision, if possible, within seven (7) days of the meeting.

Policy for Verification of Student Identity and Protection of Privacy
In compliance with United States Federal Higher Education Opportunity Act (HEOA), Public Law 110-315, all credit-bearing courses and programs offered through distance learning methods must verify that the student who registers for a distance education course or program is the same student who participates in and completes the course or program and receives academic credit. One or more of the following methods must be used:

a) A secure login and pass code;
b) Proctored examinations; and/or
c) Remote proctoring of one of more examinations using Tegrity or other technologies

Verification of student identity in distance learning must protect the privacy of student information. Personally identifiable information collected by the College may be used, at the discretion of the institution, as the basis for identity verification. For instance, a student requesting that their learning system password be reset may be asked to provide two or more pieces of information for comparison with data on file. It is a violation of College policy for a student to give his or her password to another student.

Detailed information on privacy may be located at:
http://www.lindsey.edu/media/319883/Online%20Services%20Privacy%20Policy%204.20.12.pdf

Institutional Review Board (IRB) Policies
The Lindsey Wilson College Institutional Review Board (IRB) safeguards the rights and welfare of human participants in research and other research activities. Lindsey Wilson College faculty, staff, and students, which comprise its academic unites, and facilities, are subject to the IRB policies. This includes any research for which a research agreement (e.g. MOU) identifies Lindsey Wilson College Institutional Review Board (IRB) as

LWC Boilerplate '12-'13 version (3)

the IRB of record. All student-led human subject research mush have a LWC faculty sponsor. All faculty members and students conducting human subject research are required to submit documentation of training on research involving human subjects that has been completed within two years of the onset of the proposed research. Online training is available at http://php.nihtraining.com/users/login.php.

Statement on Learning/Physical Disabilities
Lindsey Wilson College accepts students with learning disabilities and provides reasonable accommodation to help them be successful. Depending on the nature of the disability, some students may need to take a lighter course load and may need more than four years to graduate. Students needing accommodation should apply as early as possible, usually before May 15. Immediately after acceptance, students need to identify and document the nature of their disabilities. It is the responsibility of the student to provide to the College appropriate materials documenting the learning disability, usually a recent high school Individualized Education Program (IEP) and results from testing done by a psychologist, psychiatrist, or qualified, licensed person. The College does not provide assessment services for students who may be learning disabled. Although LWC provides limited personal counseling for all students, the College does not have structured programs available for students with emotional or behavioral disabilities. For more information, call Ben Martin at 270-384-7479.

Academic Success Center
The Academic Success Center, located in the Everett Building, offers peer tutoring to aid students in completing class assignments, preparing for exams and improving their understanding of content covered in a particular course. In addition, computers are available for student use.

Students are encouraged to utilize this Center as a resource for improving study strategies and reading techniques. The Center also offers assistance with other academic problems resulting from documented learning disabilities. All services are free of charge to all Lindsey Wilson College students (students with learning disabilities are responsible for providing documentation from an appropriate outside professional source such as a professional evaluation or school IEP). Please contact Maretta Garner, Tutor Coordinator at 384-8037 for further information and assistance.

Writing Center and Mathematics Center
The Writing Center (located in the Slider Humanities & Fine Arts Building), and the Mathematics Center (located in the Fugitte Science Building) are available for specialized tutoring at no charge to students. Please contact Jared Odd, Writing Center Coordinator, at 384-8209 or Linda Kessler, Math Tutor Coordinator, at 384-8115 for further information and assistance.

Final Exams
Final Exams for day classes are scheduled for the Fall 2012 semester on **December 10-14 and May 6-10** for the Spring 2013 semester. The academic calendar, which contains the schedule for finals, is in the College Catalog and course schedule listing. Please make any necessary flight arrangements **after** the final exam week. **Students will not be permitted to take early finals** unless extenuating circumstances exist. "Extenuating circumstance" means illness, a verified family emergency or participation in officially sponsored travel in support of an event arranged by the College. **Travel arrangements must be made in sufficient time** that tickets may be obtained after final exams and the semester is officially over. All requests for early finals must be made in person to the Academic Affairs Office.

Email Policy
All Lindsey Wilson College students are required to communicate with LWC faculty and staff via LWC (Lindsey.edu) email addresses only. Alternative email addresses should not be used when communicating with LWC faculty and staff.

Cell Phone Policy
Student cell phones will be off during class time unless prior arrangement is made with the instructor.

LWC Boilerplate '12-'13 version (4)

Adding/Dropping a Course

Students enrolled in the following courses cannot drop these classes during the semester: READ 0713, 0723, 0733, 0903, 1013 and 1023; STSK 1003; ENGL 0903 and 0904; and ESL 0803, 0804 and 0854.

For undergraduate classes at the Columbia campus, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the advisor and the instructor for each course involved as indicated on the Add/Drop Form. The change must be reported to the Business Office and the Registrar's Office on an Add/Drop Form, which may be obtained from the Registrar's Office. For AIM courses, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Director of the Evening Program. For courses taught at Community sites, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Site Coordinator for the campus. Permission to add courses will not be given after the last date for late registration. Authorization for dropping a course will not be approved after more than 75% of the instructional days for a course are completed, as outlined below:

Course	Deadline	Submitted by the Student to
Columbia undergraduate and graduate full semester courses	Not later than 30 days before the end of the semester	Registrar
AIM courses	By the sixth week of class	Registrar
Courses at Community Campuses	By the third weekend of class	Site Coordinator or the Registrar

If changes are not properly approved and officially reported as stated above, students will receive a grade of F in the courses for which they are officially registered, and they will be charged for all such courses. Students will not receive credit for changed or added courses unless they officially register for those courses.