**REQUEST FOR ADDITION OF NEW COURSE**

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Department | Philosophy and Religious Studies
-------------|----------------------------------
College      | Humanities and Social Science
Date         | 1/19/2015

**PROPOSED COURSE DESCRIPTION**

<table>
<thead>
<tr>
<th>Rubric &amp; No.</th>
<th>PHIL 4955</th>
<th>Title</th>
<th>Philosophy of Biology</th>
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<tbody>
<tr>
<td>Short Title</td>
<td>Philosophy of Biology</td>
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<tr>
<td>Semester Hours of Credit</td>
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<td>If combination course type, # hrs. of credit for</td>
<td>Lecture:</td>
<td>Lab/Sem/Rec:</td>
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<td>Repeat Credit Max. (if repeatable):</td>
<td>credit hours</td>
<td>Graduate Credit?</td>
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<td>Credit will not be given for this course and:</td>
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<td>Course Type (Indicate hours in the appropriate course type.)</td>
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<td>Lecture</td>
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<td>Maximum enrollment per section: (use integer, e.g. 25 not 20-30)</td>
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<td>Grading System:</td>
<td>Letter Grade</td>
<td>Pass/Fail</td>
<td>Final Exam:**</td>
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<td><strong>(Attach justification if the proposed course will not hold a final exam during examination week.)</strong></td>
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**Course Description:**

(Concise catalog statement exactly as you wish it to appear in the General Catalog)

4955 Philosophy of Biology (3) Philosophical issues raised by evolutionary theory and the life sciences.

**BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION.)**

If this course is approved, will additional staff be needed? Yes | No | X
Will additional space, equipment, special library materials or other major expense be involved? Yes | No | X

**ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)**

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses? SYLLABUS: Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria (For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students).

**APPROVALS**

Department Faculty Approval Date | 1/12/2015 | College Faculty Approval Date | 3-11-15
Department Chair Signature | (date) | College Dean Signature | (date) | 3-17-15
Graduate Dean Signature | (date) | Chair, FS C&C Committee | (date) | 4-27-15
College Contact | E-mail | Academic Affairs Approval | (date) | (date)
Course Proposal: Philosophy of Biology

Formal Catalog Statement:

4955 Philosophy of Biology (3) Philosophical issues raised by evolutionary theory and the life sciences.

Justification: Evolutionary theory, as an account of the nature of human beings as well as the properties and characteristics that we possess, promises a dramatic revision of many traditional philosophical areas of inquiry. Philosophers have seen in evolution answers to traditional problems in epistemology (how has evolution produced beings capable of knowledge?), in ethics (what is the evolutionary function of ethical beliefs, and how can this relate to their justification?), in metaphysics (does evolution ground an appeal to an “essence” for biological organisms?), and in philosophy of race and gender (are races or genders “biological” categories, and does this fact change how we ought to approach them?). To understand, then, how evolutionary theory can alter the fabric of philosophy in this way, it is necessary to analyze evolution’s conceptual foundations, particularly the interpretation of the core processes of evolutionary theory: natural selection (and with it, fitness, units of selection, and adaptation), genetic drift (and with it, the role of chance and randomness in evolution), and questions of how evolutionary theory relates to the other sciences.

The course builds on the department’s existing offerings in the philosophy of science (PHIL 2786: Logic, Science, and Society and PHIL 4951: Philosophy of Science), allowing students the opportunity to pursue further philosophical topics found within a single scientific discipline.

While I have not yet been able to pilot this course (as piloting courses at the 4000 level is challenging in our department), there is broad evidence of demand for it. A course on the more general philosophy of science which I taught in fall of 2014 drew 15 undergraduate and 2 graduate students in philosophy, along with a graduate student and a faculty member from biology sitting in. In recent years, we have had two M.A. students in our department interested in philosophy of biology topics. As is attested in an attached e-mail with the biology department, the lack of prerequisites for the course is designed to encourage enrollment from biology undergraduate and graduate students. The course builds upon some of the material on the biology of race and gender in WGS 1001, the popular class on evolution and human behavior (an e-mail from the instructor of that course is also included). Finally, the course is common at our peer institutions, including Texas (PHL 363L), West Florida (PHI
3452), North Carolina (PHIL 352), U. of California at Davis (PHIL 38 and 108), and Duke (PHIL 314).

There is currently no course in the philosophy of any particular scientific discipline. An e-mail from the head of the biology department’s curriculum committee is attached to this document, confirming the department’s lack of objections to the course. This course does not duplicate any other course.
PHIL 4955: Philosophy of Biology

Prof. Charles H. Pence | charles@charlespence.net | 314 Coates Hall
Spring 2016 (syllabus updated April 1, 2015)

Course Description

Evolutionary biology promises to challenge a wide variety of traditional philosophical topics – metaphysical accounts of essences, epistemological accounts of knowledge, and the justification of ethical claims, to take only three. How should we understand these challenges? More importantly, how should we understand the conceptual foundations of evolutionary theory itself? These are the questions with which we will grapple in this course, by coming to understand evolution’s past and present from a philosophical point of view.

Course Goals

After this course, students will be able to:

- Describe evolutionary theory, both as found in Darwin’s Origin and today,
- Understand debates over conceptual foundations of evolutionary theory, including the interpretation of fitness, natural selection, genetic drift, and adaptation,
- Analyze the impact of these debates on traditional questions throughout philosophy,
- Create their own contribution to these arguments through lucid, well-reasoned papers.

Essential Information

- Class: Tuesday and Thursday, 3:00–4:20PM
- Office Hours: Monday and Wednesday, 12:00–2:30PM
- Final Exam: (to be announced by registrar)

Required Readings

Two books need to be purchased at the bookstore. First is Charles Darwin’s On the Origin of Species. We will use the first edition of this book, published in facsimile by Harvard University Press. Second is Elliott Sober’s edited anthology, Conceptual Issues in Evolutionary Biology, published by The MIT Press. This book has changed
substantially over its various editions, it's important that you have the third edition, published in 2006.

A variety of other readings will be distributed electronically. These will be placed online, on the course's Moodle page. All other information about the course, including any updates to this syllabus, can be found on the course website, which is not on Moodle. The course website can be found by visiting http://www.charlespence.net/courses/ and following the link for our class.

It is expected that you have read the assigned chapters or pages prior to class for the background necessary to properly participate in the discussion and think critically about the concepts addressed. As a general policy, for each hour you are in class, you should plan to spend at least two hours preparing for the next class. Since this course is for three credit hours, you should expect to spend around six hours outside of class each week reading or writing assignments for the class.

Assignments and Grading

Grade breakdown:
- Discussion participation: 15%
- Paper outline: 15%
- Peer review comments: 10%
- Final paper grade: 30%
- Final exam: 30%

Conversion to letter grades is as follows. Examination grades may be curved, depending upon student performance. These curves will only result in the raising of student grades, never lowering. Fractions of a point are rounded to the nearest integer using Excel. Given a dispute, Excel's math wins.

- A: 90–100
- B: 80–89
- C: 70–79
- D: 60–69
- F: 0–59

The primary product from this course will be a single seminar paper. We will construct this paper in stages, beginning with a short outline due around the middle of the semester, and progressing through a peer-review draft editing session to the paper's submission at the end of the term. The hope is to produce high-quality papers, suitable for submission to an undergraduate journal (or, for the graduate students, a professional journal) or conference if you're inclined to do so. Some paper topics will be discussed over the course of the semester, but it will ultimately be your responsibility to select a topic in line with whatever issue in the course you find the most exciting. (More information on the paper process will be forthcoming during the semester, in separate documents.)
Grading for graduate students will be on the same basis as undergraduates, excepting an expectation of longer and more sophisticated seminar papers.

Paper deadlines are:
- Outline of paper due: Thursday of Week 7
- Drafts due to your peer reviewer: Thursday of Week 11
- Peer review comments due to your colleagues: Tuesday of Week 13
- Final draft due: Last day of class, Thursday of Week 15

Given the size of the course, I’m hoping to foster a hybrid of a lecture and a seminar format. I’ll start each day by lecturing for hopefully not more than two-thirds of the class period, opening things up to discussions when I’m finished. These discussions will be where you really learn what’s going on in the material – philosophy is always best as a conversation. So while I’ll be doing everything I can to get you the nuts and bolts of the material, everyone is expected to study the reading carefully and come prepared to discuss it.

Finally, we will have a short-essay final exam, designed to let you work through some of the issues other than those that you write about in your paper. I will distribute the questions for this exam in advance, and encourage you to work together to study in groups.

Each student will be allowed to miss two class periods with no reduction in grade. Each absence after that will remove points from the seminar participation grade. Late work will be penalized by one letter grade (= 10 points) for each day that it is late. Absences will be evaluated in accordance with LSU policy, and I will do my best to be accommodating to good reasons for being out of class.

Interruptions or disruptions to class or to the ability of other students to learn will not be tolerated, and will be referred to Student Advocacy & Accountability. All of your work in this course falls under your academic obligations in the LSU Code of Student Conduct. Cheating or plagiarism will be detected, and it is my policy to refer every instance to SAA.

If you require accommodations from the Office of Disability Services, please get in touch with that office early in the semester and get that information to me as soon as possible. Also, the final exam schedule is set now – if you have three or more exams in one day, you can already find this out, and should get one rescheduled through your Dean’s office.

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Schedule and Readings

- **Week 1:**
  January 13: Introductions: *(no reading)*
  January 15: Darwin on Natural Selection: *Origin*, ch. 1–5
• **Week 2:**
  January 20: Darwin on Natural Selection: *(no new reading)*
  January 22: Darwin on Problems with Evolution: *Origin*, ch. 6, 9–10

• **Week 3:**
  January 29: Summing up Darwin: M.J.S. Hodge, "Natural Selection as a Causal, Empirical, and Probabilistic Theory" *(online)*

• **Week 4:**
  February 3: Fitness: *Conceptual Issues in Evolutionary Biology (CI)*, ch. 1–2
  February 5: Units of Selection: *CI*, ch. 3–4

• **Week 5:**
  February 10: Units of Selection: Lewontin, "The Units of Selection"; Wade, "A Critical Review of the Models of Group Selection" *(online)*
  February 12: Adaptation: Lewontin, "Adaptation" *(online)*

• **Week 6:**
  February 17: *(Mardi Gras holiday)*
  February 19: Adaptationism: *CI*, ch. 5, Pigliucci and Kaplan, "The Fall and Rise of Dr. Pangloss" *(online)*

• **Week 7:**
  February 24: Constraint: Amundson, "Two Concepts of Constraint" *(online)*
  February 26: Laws in Biology: *CI*, ch. 11–12
  **PAPER OUTLINE DUE**

• **Week 8:**
  March 3: Chance in Evolution: Pence, "The Early History of Chance in Evolution"; Beatty and Desjardins, "Natural Selection and History" *(online)*
  March 5: Essentialism: *CI*, ch. 16–17

• **Week 9:**
  March 10: Species: de Queiroz, "Different Species Problems and their Resolution" *(online)*; *CI*, ch. 18
  March 12: Species: Franklin, "Bacteria, Sex, and Systematics"; Wilkins, "How to Be a Chaste Species Pluralist-Realist" *(online)*

• **Week 10:**
  March 17: Teleology: Neander, "Functions as Selected Effects"; Walsh, "Organisms as Natural Purposes" *(online)*
  March 19: Evolution and Development: Griffiths and Gray, "Developmental Systems and Evolutionary Explanation"

• **Week 11:**
March 26: The Scope of Evolution: Pigliucci, "An Extended Synthesis for Evolutionary Biology" (online)

**DRAFTS DUE TO PEERS**

- **Week 12:**
  March 31: Evolution and Physics – Reductionism: CI, ch. 13–15
  April 2: Reductionism: *(no new reading)*

  *(spring break)*

- **Week 13:**
  April 14: Evolution and Progress: Erwin and Conway Morris, "Evolutionary Contingency / Evolutionary Convergence" (online)

    **PEER REVIEW COMMENTS DUE**

  April 16: Evolutionary Psychology: CI, ch. 7, 9, 10

- **Week 14:**
  April 21: Evolutionary Ethics: CI, ch. 26–27
  April 23: Evolution and Race: CI, ch. 22–23

- **Week 15:**
  April 28: Evolution and Creationism: Sober, "What is Wrong with Intelligent Design?"; Sober, "Evolutionary Theory, Causal Completeness, and Theism" (online)

  April 30: Evolution of Culture: CI, ch. 24; Laland et al., "How Culture Shaped the Human Genome" (online); Ramsey, "The Fundamental Constraint on the Evolution of Culture" (optional)

  **FINAL PAPER DUE**
Charles,

I apologize for the delay that was my fault. The chair and associate chairs discussed this and we have no objections. I can send you something more formal, just let me know what you need. We do have a question. What sort of preparation would you expect for a student to take this class? There is not a prerequisite in the description and the “practicing evolutionist” I ran this by was wondering if maybe an advanced undergraduate or graduate student from our department might be able to take it.

Dave
Dave--

Thanks so much, and no worries! No prereqs is very much on purpose — I’d be more than happy to see upper-
division biology undergraduates or graduate students take the class. I think they could get quite a bit out of the
course, and I think the presence of some scientists always makes courses like these better.

When I get around to offering it (looking like maybe Spring ’16?), I’m hoping to send an e-mail your way to let your
students know that it’s going to be on the schedule.

And I think just this e-mail is fine for what I need — I’ll let you know if they come after me for something more
official.

Thanks again,
--Charles

[Quoted text hidden]
Hi Charles,

I fully support your course, which has close ties to some of key issues we cover in WGS1001. It will certainly add to our curriculum. I have forwarded it to other professors who teach in WGS1001.

I would say that the title seems a bit broad for the syllabus. Your course seems to be mostly about the philosophy of evolution. I would think that there are other areas of philosophy of biology. There have been some interesting discussions centered around the meaning of the term "gene," and whether it is even relevant anymore in light of modern understanding and viewpoints. But it is your course, and the material is certainly of great interest.

John
Hi Charles,

I agree with John's comments. Overall, I think there is a lot of material in which to work from. My suggestion would be to keep the title of the course the same but to simply add/change material as you see fit. It would be a good course to do as a communication intensive course. You could have the students present different topics in the media, etc.

Good luck with the development of your course.

Fern

Fernando Galvez, Ph.D.
Associate Professor
Dept. Biological Sciences, LSB 216
Louisiana State University
Baton Rouge, Louisiana 70803
(t) 225-578-0599
(f) 225-578-2783
To the Curriculum Committee and Registrar:

Please find responses to your queries concerning my courses. If you would like any more information, don't hesitate to ask!

PHIL 2029

1. Yes, the course will be an elective option for the philosophy major (BA) and minor.

PHIL 4955

1. Yes, the course will be an elective option for the philosophy major (BA), minor, and Master’s of Arts degree.

2. The course reflects a longstanding area of study in the philosophy of science (including specific journals and professional societies dedicated just to philosophy of biology). Throughout this longstanding history, the field of philosophy of biology has had a strong and consistent focus on evolutionary biology. At least as the field is currently constituted, any course covering the philosophy of biology will necessarily include extensive discussion of evolutionary theory. Were the field to undergo significant changes in the future, we will revisit the course description, but there is no reason to predict such a change is near. Thus, every time we teach the course at LSU, we will have some discussion of evolutionary theory, and so it is a useful and necessary component of the course description. Finally, for these reasons, it would not make sense to offer the course as a special topics course at this time.

Thanks very much,
—Charles H. Pence, Asst. Prof., Philosophy
Anna

I called Dr. Pence and had a further discussion with him to clear up one remaining concern. It turns out that this field of study is currently focused on evolution but in the literature is always under the title of Phil of Biology. To keep the title of Phil 4955 aligned with our peer institutions and the research literature, Phil of Biology is a better title than Phil of Evolution. With that information together with the justification he sent you I am comfortable that he has answered all of the committee's concerns. We should now fully accept both Phil 2029 and 4955.

Anna Castrillo
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225) 578-4111
Fax: (225) 578-5991

From: Delbert Burkett
Sent: Wednesday, April 22, 2015 4:03 PM
To: Anna M Castrillo
Subject: Fw: Fw: Comment by C&C Committee

Anna,

Attached is the response to the questions raised by the Committee about the two PHIL proposals.
Delbert Burkett

From: Oliver J Rocha
Sent: Wednesday, April 22, 2015 2:28 PM
To: Delbert Burkett
Subject: Re: Fw: Comment by C&C Committee

Hello Delbert,

This is the response to their questions that Charles drafted, and I edited.

Thanks,
James

From: Delbert Burkett
Sent: Saturday, April 18, 2015 2:49 PM
To: Oliver J Rocha
Subject: Fw: Fw: Comment by C&C Committee

James,

See the issues raised by the C&C Committee for the two PHIL proposals. Discuss these with Charles and let me know what to reply.

Delbert

From: Anna M Castrillo
Sent: Friday, April 17, 2015 3:43 PM
To: Delbert Burkett
Subject: RE: Fw: Comment by C&C Committee

Thank you, Dr. Burkett. The Committee met today and they had a few questions that are addressed in the attached document regarding the two PHIL proposals.

Sincerely,

Anna Castrillo, M.A.
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225)578-4111
Fax: (225)578-5991

From: Delbert Burkett
Sent: Friday, April 17, 2015 3:03 PM
To: Anna M Castrillo
Subject: Fw: Fw: Comment by C&C Committee
Anna,

Below is the email exchange that you requested.

Delbert Burkett

From: Charles Pence <charles@charlespence.net>
Sent: Thursday, April 16, 2015 10:56 AM
To: Delbert Burkett
Subject: Re: Fw: Comment by C&C Committee

The response chain there is:

Me:

Thanks so much! I appreciate it.

Agreed about the course title, insofar as philosophers have been pretty blinkered about the breadth of biology for some time now. It's something I'm hoping to fix as I have the chance to iterate the course for a few years - there's been some great recent work on ecology, morphology, development, anthro, origins of life stuff, etc., all of which I'd love to teach.

Best,
--Charles

Prof. Fernando Galvez:

Hi Charles,
I agree with John's comments. Overall, I think there is a lot of material in which to work from. My suggestion would be to keep the title of the course the same but to simply add/change material as you see fit. It would be a good course to do as a communication intensive course. You could have the students present different topics in the media, etc.

Good luck with the development of your course.

Fern

Me:

Thanks so much!
--CP

That's all the exchanged e-mails.
--Charles

On Thu, Apr 16, 2015 at 10:54 AM, Delbert Burkett <dburket@lsu.edu> wrote:

Charles,

Can you send me the response that Anna is referring to below?

Thanks,
Delbert
Dr. Burkett,

One of the committee members has asked to see the response from Dr. Pence to Dr. Larkin regarding the course title. I believe Dr. Larkin commented that the title was too broad. They just want to see what Dr. Pence responded back.

Sincerely,

Anna Castrillo, M.A.
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225) 578-4111
Fax: (225) 578-5991

Charles H. Pence
Assistant Professor
Department of Philosophy and Religious Studies
Louisiana State University
http://charlespence.net/
REQUEST FOR ADDITION OF NEW COURSE

PROPOSED COURSE DESCRIPTION

Rubric & No. PHIL 2029
Title Ethics and New Weapons Technologies

Short Title (≤ 19 characters) Ethics / New Weapons

Semester Hours of Credit 3

Repeat Credit Max. (if repeatable): _______ credit hours
Graduate Credit? Yes X No

Credit will not be given for this course and:

Course Type (Indicate hours in the appropriate course type.)

Lecture: 3 Lab ______ Seminar ______ Recitation ______ Lec/Rec ______ Lec/Sem ______ Lec/Lab ______ Res/Ind ______ Clin/Pract ______ Intern ______

Maximum enrollment per section: (use integer, e.g. 25 not 20-30) 55

Grading System: Letter Grade X Pass/Fail ______ Final Exam:** Yes X No ______

**(Attach justification if the proposed course will not hold a final exam during examination week.)**

Course Description:
(Concise catalog statement exactly as you wish it to appear in the General Catalog)

2029 Ethics and New Weapons Technologies (3) Ethical issues raised by recent advancements in military and weapons technologies.

BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION.

If this course is approved, will additional staff be needed? Yes ______ No X

Will additional space, equipment, special library materials or other major expense be involved? Yes ______ No X

Academic Affairs Approval: ______ (Date)

ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?

SYLLABUS: Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria
(For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students).

APPROVALS

Department Faculty Approval Date 1/12/2015 College Faculty Approval Date 3-11-15

Department Chair Signature ______ (date) College Dean Signature ______ (date)

Graduate Dean Signature ______ (date)

College Contact E-mail
Course Proposal: *Ethics & New Weapons Technologies*

Formal Catalog Statement:

**2029 Ethics and New Weapons Technologies** (3) Ethical issues raised by recent advancements in military and weapons technologies.

**Justification:** The landscape of the twenty-first century battlefield is rapidly changing. Contemporary warfare is often far removed from the clash of large, standing armies on the open battlefield. In the United States' use of "targeted killings" via unmanned drone in Pakistan and Yemen (which are not, otherwise, theaters of war) to the deployment of the Stuxnet computer virus (most likely by Israel and the United States) designed to target the computers that operate industrial equipment in Iran's nuclear weapons program, we already see examples of this new kind of warfare. A wide variety of ethical issues are raised by these new developments in weapons technology. How much control should humans have over warfare? What if autonomous systems can be made to behave more ethically than humans? How do these technologies fit into our traditional moral theories and justifications for going to war?

The course builds on the department's substantial existing offerings in lower-division ethical theory (PHIL 2000, *Contemporary Moral Problems*, PHIL 2020, *Ethics*), and applied ethics (PHIL 2021, *Environmental Ethics*, PHIL 2025, *Bioethics*). Military ethics and ethics of warfare are one of the only areas of applied ethics which our students do not yet have the opportunity to study.

I piloted the course in the spring 2015 semester, as PHIL 3020 (our special topics course). In preparing the course, I have collaborated with LSU's AFROTC detachment for course advertisement. The course has over 30 enrolled students, demonstrating substantial interest from the student body. When listing the course officially, I chose to do so at the 2000 level rather than the 3000 level, as the higher level of the pilot course has reduced the enrollment of non-majors and ROTC cadets, two groups for whom the course is designed to be offered.

There is currently no course in military ethics or the ethics of warfare outside the ROTC curriculum. An e-mail from the commander of LSU AFROTC is attached to this document, confirming their support. This course does not duplicate any other course.
PHIL 2029: From Drones to Cyberwar: Ethics of New Weapons Technologies

Prof. Charles H. Pence | charles@charlespence.net | 314 Coates Hall

Spring 2015

Course Description

The landscape of the twenty-first century battlefield is rapidly changing. Contemporary warfare is often far removed from the clash of large, standing armies on the open battlefield. In the United States’ use of “targeted killings” via unmanned drone in Pakistan and Yemen (which are not, otherwise, theaters of war) to the deployment of the Stuxnet computer virus (most likely by Israel and the United States) designed to target the computers that operate industrial equipment in Iran’s nuclear weapons program, we already see examples of this new kind of warfare. The future promises that ever more remote possibilities will become reality – entirely autonomous robotic weapon systems are already under deployment in Iraq and Korea, non-lethal electromagnetic- and sound-based weapons are under development, and research continues actively on automated, armed vehicles and biologically or robotically enhanced soldiers. The increasing pace of weapons research, however, has been matched by a large number of ethical worries, raised by military leaders, scholars, legislators, journalists, and non-profit and humanitarian groups.

In this course, students will gain familiarity with the main forms of emerging weapons technologies and reflect on the ethical and legal considerations that bear on whether and how these weapons should be used. Topics to be covered fall into four categories: (1) types of emerging weapons technologies (drones, robotic systems, non-lethal weapons, cyberwarfare, bioenhancement, and data mining), (2) positions on the ethics of peace and war (pacifism, political realism, and just war theory), (3) the Law of Armed Conflict (including the Geneva Conventions), and (4) normative ethical theories (consequentialism, deontology, and virtue ethics). Course grades will be determined by two papers, two exams (midterm and final), and one group report and presentation.

Course Goals

After this course, students will be able to:
- Explain what drones, warbots, non-lethal weapons, cyberwarfare, soldier enhancement, and data mining are and how they are used or could potentially be
used by militaries,
• Identify many of the legal and ethical issues raised by the various emerging weapons technologies,
• Explore these issues in well-argued, concise philosophical papers,
• Evaluate these questions, as a group, via class discussions focused on each of these technologies in the final weeks of the course and reports summarizing the results of presentation research.

**Essential Information**

- **Class:** Tuesday and Thursday, 12:00PM-1:30PM, 218 Coates
- **Office Hours:** Tuesday, 2:00PM-4:30PM, and Wednesday, 2:30PM-5:00PM, as well as by appointment
- **Final Exam:** Thursday, May 7, 10:00AM-12:00PM

**Required Readings**

The required books for this course, available at the bookstore, are:

- Michael Walzer, *Just and Unjust Wars*
- Russ Shafer-Landau, *The Fundamentals of Ethics*

All other readings for the course will be distributed electronically, on the Moodle page for this class. In particular, some distributed case studies are designed to give you the opportunity to think through the ethical implications of particular technologies; think about them very carefully.

It is expected that you have read the assigned chapters or pages prior to class for the background necessary to properly participate in the discussion and think critically about the concepts addressed. As a general policy, for each hour you are in class, you should plan to spend at least two hours preparing for the next class. Since this course is for three credit hours, you should expect to spend around six hours outside of class each week reading or writing assignments for the class.

While readings will be posted on Moodle, everything else will be on the course's website, which is not hosted on Moodle. The course website can be found by visiting [http://www.charlespence.net/courses/](http://www.charlespence.net/courses/) and following the link for our class.

The syllabus may well be updated over the course of the semester – such changes will be announced over e-mail, and the updated documents will all be found at the course website. **Make sure to check the syllabus** when preparing to do a reading; I may have provided you with a PDF on the website that contains more than you are required to read, with excerpts noted in the syllabus.

**Assignments and Grading**

More information will be provided as the semester goes on, but the major assignments in this course are:
• **First Paper (10%)**: Assigned on 2/10, due on 2/24. A 1,000–1,500 word paper on the topic of just war theory.

• **Midterm Exam (20%)**: On 3/5. This exam will include both short-answer questions and longer essay questions.

• **Second Paper (20%)**: Assigned on 3/12, due on 3/31. A 1,000–1,500 word paper on the topic of one of the particular emerging weapons technologies that we will discuss in the course. This paper will prepare you for working on your group presentation.

• **Group Presentation (15%)**: In weeks 14 and 15. A group presentation on one of the particular emerging weapons technologies discussed in the course. Your group will be formed from those students who wrote on one particular technology for the Second Paper. You will also submit a written group presentation report summarizing the results of your research, which will be read and discussed by the class as a whole.

• **Final Exam (25%)**: On Thursday, May 7, at 10:00 AM. This exam will include both short-answer questions and longer essay questions.

• **Attendance and Participation (10%)**: Students are expected to attend every class session and participate in in-class discussions.

Papers and group presentation reports will be submitted in electronic form (via e-mail, in Word or PDF format), by the beginning of the class period when they are due. Comments will be returned on your papers electronically.

Conversion to letter grades is as follows. Examination grades may be curved, depending upon student performance. These curves will only result in the raising of student grades, never lowering. Fractions of a point are rounded to the nearest integer using Excel. Given a dispute, Excel's math wins.

- A: 90–100
- B: 80–89
- C: 70–79
- D: 60–69
- F: 0–59

Each student will be allowed to miss three class periods with no reduction in grade. Each absence after that will remove points from the participation grade. Late work will be penalized by one letter grade (= 10 points) for each day that it is late. Absences will be evaluated in accordance with LSU policy, and I will do my best to be accommodating to good reasons for being out of class.

Interruptions or disruptions to class or to the ability of other students to learn will not be tolerated, and will be referred to Student Advocacy & Accountability. All of your work in this course falls under your academic obligations in the LSU Code of


Student Conduct. Cheating or plagiarism will be detected, and it is my policy to refer every instance to SAA.

If you require accommodations from the Office of Disability Services, please get in touch with that office early in the semester and get that information to me as soon as possible. Also, the final exam schedule is set now – if you have three or more exams in one day, you can already find this out, and should get one rescheduled through your Dean's office.

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Schedule and Readings

- **Week 1:**
  1/15: Introduction to Emerging Weapons Technologies
  Readings: Lucas, "The Threat Posed by Military Technologies to Professional Military Ethics"; 2010 McCain Conference Executive Summary

- **Week 2:**
  1/20: Introduction to Just War Theory and the Law of Armed Conflict
  1/22: Introduction to Normative Ethics
  Readings: Timmons, *Moral Theory: An Introduction*, chapter 1

- **Week 3:**
  1/27: Why Go to War? The Causes of War
  Readings: Walzer, chapters 1-3
  1/29: Pacifism, Cyber Warfare, and Non-Lethal Weapons
  Readings: Gandhi, *Hind Swaraj*, chapter 17; Dorothy Day, "Our Country Passes from Undeclared War to Declared War"

- **Week 4:**
  2/3: Technology Lecture: Soldier Enhancement
  2/5: Regulating Scientific and Military R&D
  Readings: Lautenschläger, "Controlling Military Technology"; Schneier, "Our Decreasing Tolerance to Risk"

- **Week 5:**
  2/10: Just War Theory: *jus ad bellum* and *jus in bello*
  First paper information distributed; Readings: Walzer, chapters 8 and 9
2/12: Just War Theory: Terrorism and Supreme Emergency
Readings: Walzer, chapters 11, 12, and 16 (optional: 10 and 17)

• Week 6:
  2/17: (Mardi Gras holiday)
  2/19: Technology Lecture: Nuclear and Non-Lethal Weapons

• Week 7:
  2/24: Law of Armed Conflict: Historical Overview
First paper due; Readings: International Humanitarian Law Research Initiative, "IHL Primer #1: What is IHL?"; Additional Protocol I to the Geneva Conventions: Preamble, Articles 1–2
  2/26: Law of Armed Conflict: The Geneva Conventions and Additional Protocols

• Week 8:
  3/3: Law of Armed Conflict: The Four Principles
Readings: Solis, "Law of Armed Conflict's Four Core Principles"
  3/5: Midterm Quiz

• Week 9:
  3/10: Technology Lecture: Cyber- and Bio-Weapons
Readings: Dipert, "The Ethics of Cyberwarfare"; Lin, Alhoff, and Rowe, "War 2.0"; Owens, Dam, and Lin, "Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyberattack Capabilities" (optional)
  3/12: Fundamentals of Ethics: Natural Law, Absolute Moral Principles
Readings: Shafer-Landau, chapters 6 and 15

• Week 10:
  3/17: Fundamentals of Ethics: Consequentialism
Readings: Shafer-Landau, chapters 9 and 10
  3/19: Fundamentals of Ethics: Kantian Deontology
Readings: Shafer-Landau, chapters 11 and 12

• Week 11:
  3/24: Technology Lecture: Robots and Unmanned Vehicles
Readings: Quintana, "The Ethics & Legal Implications of Military Unmanned Vehicles"
  3/26: Fundamentals of Ethics: Virtue Ethics
Readings: Shafer-Landau, chapter 17
• Week 12:
  3/31: Law of Armed Conflict: Robots and Responsibility
  Second paper due; Readings: Walzer, chapter 19
  4/2: Movie Screening: Remote Control War
  (spring break)

• Week 13:
  4/14: What is Privacy in the Digital Age?
  Readings: Robison, "Privacy and Personal Identity"; Shoemaker, "Self-Exposure and Exposure
  of the Self: Informational Privacy and the Presentation of Identity"
  4/16: Technology Lecture: Data-Mining, Ubiquitous Sensors, and Privacy
  Big Data"; Office of the Director of National Intelligence, "Data Mining Report" (optional)

• Week 14:
  4/21: Law of Armed Conflict: Targeting
  Readings: Solis, "Targeting"
  4/23: Group Presentations, Parts I and II: Cyber Warfare and Remotely Operated
  Vehicles

• Week 15:
  4/28: Group Presentations, Parts III and IV: Soldier Enhancement and Non-
  Lethal Weapons
  4/30: Group Presentations, Part V: Autonomous Robotic Systems; Discussion
  of Group Reports
  Readings: Group Project Reports
We let the students know, but like you said, if it's not listed properly...it's difficult to get them to risk it.

I have no problems with the course as we discussed it. I think it would be a good course to take from an ROTC perspective.

V/R,

Dwight W. Pertuit Jr., Lt Col, USAF
Commander, AFROTC Detachment 310
225 578-4530 work
225 578-4407 front desk
402 305-7012 cell
dpertu1@lsu.edu
To the Curriculum Committee and Registrar:

Please find responses to your queries concerning my courses. If you would like any more information, don't hesitate to ask!

PHIL 2029

1. Yes, the course will be an elective option for the philosophy major (BA) and minor.

PHIL 4955

1. Yes, the course will be an elective option for the philosophy major (BA), minor, and Master’s of Arts degree.
2. The course reflects a longstanding area of study in the philosophy of science (including specific journals and professional societies dedicated just to philosophy of biology). Throughout this longstanding history, the field of philosophy of biology has had a strong and consistent focus on evolutionary biology. At least as the field is currently constituted, any course covering the philosophy of biology will necessarily include extensive discussion of evolutionary theory. Were the field to undergo significant changes in the future, we will revisit the course description, but there is no reason to predict such a change is near. Thus, every time we teach the course at LSU, we will have some discussion of evolutionary theory, and so it is a useful and necessary component of the course description. Finally, for these reasons, it would not make sense to offer the course as a special topics course at this time.

Thanks very much,
—Charles H. Pence, Asst. Prof., Philosophy
Anna M Castrillo

From: [Delbert Burkett]
Sent: Wednesday, April 22, 2015 4:03 PM
To: Anna M Castrillo
Subject: Fw: Fw: Comment by C&C Committee
Attachments: PHIL response to CC committee questions.docx

Anna,

Attached is the response to the questions raised by the Committee about the two PHIL proposals.

Delbert Burkett

From: [Oliver J Rocha]
Sent: Wednesday, April 22, 2015 2:28 PM
To: Delbert Burkett
Subject: Re: Fw: Comment by C&C Committee.

Hello Delbert,

This is the response to their questions that Charles drafted, and I edited.

Thanks,
James

From: Delbert Burkett
Sent: Saturday, April 18, 2015 2:49 PM
To: Oliver J Rocha
Subject: Fw: Fw: Comment by C&C Committee

James,

See the issues raised by the C&C Committee for the two PHIL proposals. Discuss these with Charles and let me know what to reply.

Delbert

From: Anna M Castrillo
Sent: Friday, April 17, 2015 3:43 PM
To: Delbert Burkett
Subject: RE: Fw: Comment by C&C Committee.

Thank you, Dr. Burkett. The Committee met today and they had a few questions that are addressed in the attached document regarding the two PHIL proposals.

Sincerely,
From: Delbert Burkett  
Sent: Friday, April 17, 2015 3:03 PM  
To: Anna M Castrillo  
Subject: Fw: Fw: Comment by C&C Committee  

Anna,

Below is the email exchange that you requested.

Delbert Burkett  

From: Charles Pence <charles@charlespence.net>  
Sent: Thursday, April 16, 2015 10:56 AM  
To: Delbert Burkett  
Subject: Re: Fw: Comment by C&C Committee  

The response chain there is:

Me:

Thanks so much! I appreciate it.

Agreed about the course title, insofar as philosophers have been pretty blinkered about the breadth of biology for some time now. It's something I'm hoping to fix as I have the chance to iterate the course for a few years - there's been some great recent work on ecology, morphology, development, anthro, origins of life stuff, etc., all of which I'd love to teach.

Best,  
--Charles  

Prof. Fernando Galvez:

Hi Charles,  
I agree with John's comments. Overall, I think there is a lot of material in which to work from. My suggestion would be to keep the title of the course the same but to simply add/change material as you see fit. It would be a good course to do as a communication intensive course. You could have the students present different topics in the media, etc.  
Good luck with the development of your course.  
Fern

Me:

Thanks so much!  
--CP
That's all the exchanged e-mails.
--Charles

On Thu, Apr 16, 2015 at 10:54 AM, Delbert Burkett <dburket@lsu.edu> wrote:

Charles,

Can you send me the response that Anna is referring to below?

Thanks,
Delbert

From: Anna M Castrillo
Sent: Thursday, April 16, 2015 8:30 AM
To: Delbert Burkett
Subject: Comment by C&C Committee

Dr. Burkett,

One of the committee members has asked to see the response from Dr. Pence to Dr. Larkin regarding the course title. I believe Dr. Larkin commented that the title was too broad. They just want to see what Dr. Pence responded back.

Sincerely,

Anna Castrillo, M.A.
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225)578-4111
Fax: (225)578-5991

Charles H. Pence
Assistant Professor
Department of Philosophy and Religious Studies
Louisiana State University
http://charlespence.net/
REQUEST FOR ADDITION OF NEW COURSE

Department: Entomology
College: Agriculture

PROPOSED COURSE
Rubric & No.: 7016
Title: Biological Control

COURSE CREDIT
Graduate Credit: YES

Semester Hours of Credit: 3

If course may be repeated for credit (i.e. special topics), course may be taken for a max. of ___ credit hours.

Credit will not be given for this course and:

GRADING
Final Exam: YES
Grading System: Letter Grade

(Catalog statement exactly as you wish it to appear in the LSU General Catalog)

7016 Biological Control. Prerequisites: ENTM 2001 or permission of instructor. Theory and practice of biological control of insects, mites and weeds in natural and managed ecosystems. 2 hrs. lecture, 2 hrs. lab.

BUDGET IMPACT
If this course is approved, will additional staff be needed? YES
Will additional space, equipment, special library materials or other major expense be involved? YES

ATTACHMENTS
ATTACH THE FOLLOWING TO YOUR PROPOSAL.

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?

SYLLABUS: Including 14 week outline of the subject matter, titles of text, lab manual, and/or required readings; grading scale and criteria (For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students).

APPROVALS
Department Faculty Approval 3/26/15
College Faculty Approval 4/15/15

Graduate Dean's Signature (for 4000 level and above) 4-19-15

College Contact: Jennifer Neal
College Contact E-mail: jsherw1@lsu.edu
The proposed course will provide a solid understanding on the theory and practice of biological control of pests. A previous course with the same title was offered every other year for many years in the Department of Entomology. This former course included a substantial insect pathology component and was team-taught by two instructors. Both instructors have retired, and a new faculty member was added with responsibilities in biological control. The instructor proposes a new course with different focus, with less coverage of insect pathology and greater emphasis on biological control of weeds. This course will not duplicate other courses. The course is not required for graduate students in the Department, but the faculty consider biological control one of the core courses in the Department and the majority of graduate students in the Department will take the course during their time at LSU. Because of the broad use of biological control as a tool in integrated pest management, the target audience not only includes graduate students in the Department of Entomology but also in the School of Plant, Environmental, and Soil Sciences and the School of Renewable Natural Resources. Enrollment in the former biological control course was consistently strong and we expect the same in this new course. With the goal of stimulating the interest of domestic and foreign students, the course will cover examples of biological control programs implemented in different countries.

This course will focus on the concepts of biological control of insects, mites and weeds in natural and managed ecosystems. Development of pesticide resistance, arrival of exotic pests and interest for environmentally friendly alternatives for pest control are some reasons why biological control has become more relevant in pest management programs. The student will learn about the history of biological control including critical pest management programs that provided the foundation of the discipline. The biology and diversity of predators, parasitoids, weed feeders and entomopathogens used for pest management will be presented. The course will cover the implementation of biological control including the importation of natural enemies or classical biological control, the deliberate increase of natural enemies or augmentation biological control, and the preservation and enhancement of resources to favor natural enemies or conservation biological control. Ecological interactions of natural enemies will be discussed. In addition, the students will learn about techniques to monitor and evaluate natural enemies, federal regulations and the importance of educating the stakeholders about biological control. Having a solid understanding of biological control will help students in the development of effective pest management programs.
ENTM 7016 Biological Control (3 h)

Syllabus

Instructor: Dr. Rodrigo Diaz, Entomology Department
rdiaz@agcenter.lsu.edu
Mail address: 402 Life Sciences Bldg., Rm. 404.
Office: Life Sciences Annex Rm. A506
Office hours: M, W, TH; 14:00 to 17:00.
Office phone: (225) 578-1835

Text: none; readings will be distributed to students in class or sent by email.

Prerequisites: Introductory Entomology or equivalent.

Credits: 3

Catalog description: Theory and practice of biological control of insects, mites and weeds in natural and managed ecosystems.

During this course, the student will learn:

1) Definitions and history of biological control.
2) Biology and diversity of natural enemies of insects and weeds.
3) Biological control approaches: classical, augmentation, and conservation.
4) Monitoring and evaluation of natural enemies.
5) Federal regulations of biological control.
6) Stakeholder communication in biological control.

Course design

Biological control is the use of natural enemies including predators, parasitoids, weed feeders and entomopathogens for the reduction of pest densities. This course will focus on the concepts of biological control of insects, mites and weeds in natural and managed ecosystems. The student will learn about the history of biological control including critical pest management programs that provided the foundation of the discipline. The biology and diversity of natural enemies will be presented. The course will cover the implementation of biological control including the importation of natural enemies or classical biological control, the deliberate increase of natural enemies or augmentation biological control, and the preservation and enhancement of resources to favor natural enemies or conservation biological control. In addition, the students will learn about techniques to monitor and evaluate natural enemies, federal regulations and the importance of educating the stakeholders about biological control. Having a solid
understanding of biological control will help students in the development of effective pest management programs.

The course will consist of two 1-hour lectures and one 2-hour laboratory or discussion per week. Lectures will provide the foundational concepts on each topic outlined in the course schedule below. Laboratories will consist of practical exercises relevant to the subject of each week. Discussions will be summaries of review papers about biological control and will be led by students. There will be three assignments and a final term-paper.

**Credit hour statement:** As a general policy, for each hour a student is in class, he/she should expect to spend at least two hours preparing outside of class. Since this course is for three credit hours, the student should expect to spend around six hours outside of class each week reading, reflecting/reviewing, and completing assignments.

**Course lectures**

Week 1: Importance of biological control in pest management.

Week 2: Ideal characteristics of a biological control agent.

Week 3: Biology and diversity of parasitoids.

Week 4: Biology and diversity of predators.

Week 5: Biology and diversity of weed control agents.

Week 6: Exam I. Assignment #1 due.

Week 7: Biology and diversity of entomopathogens.

Week 8: Classical biological control.

Week 9: Conservation biological control.

Week 10: Augmentation biological control. Assignment #2 due.

Week 11: Exam 2 and Biological control of weeds.

Week 12: Monitoring and evaluation of natural enemies.

Week 13: Integration of biological control in pest management.

Week 14: Laws affecting biological control in United States. Assignment #3 due.

Week 15: Communicating with stakeholders. Term paper and student presentations.

**FINAL EXAM**

**Student evaluation**

Evaluation will consist of three exams, assignments, summary reports and a final term-paper.
Exams: The exams will be multiple selection, short answers and essays from topics covered during lectures.

Assignment #1 Comparison of Nat. Enemies: There are several companies selling natural enemies over the internet. For each natural enemy below, the student will compare the pricing, quantities available, packaging, and availability of supporting information (e.g., identification, biology, release recommendation and impact on the target pest) among THREE companies. The five natural enemies are: (1) *Trichogramma* sp., there are several species, just select one; (2) *Chrysoperla*; (3) a predatory mite; (4) an entomopathogenic nematode, there are several species, just select one; and (5) an entomopathogen, there are several species, just select one. The student will pick only one natural enemy. The report must contain from whom you will purchase the natural enemy and a brief explanation of your reasons.

Assignment #2 Fact Sheet. The student will develop a fact sheet about an arthropod predator or parasitoid. This fact sheet will be placed in the Department of Entomology website. The target audience is the public in general, therefore, the language of the fact sheet should not be too technical. The contents of the fact sheet will be: common name, scientific name, a short description, distribution in United States, life cycle, target pest, impact, and selected references.

Assignment #3 Host-parasitoid collection. The student will prepare a collection of parasitoids and their hosts. Host remains should be preserved in gelatin capsules, vials, or any container suitable for preservation. Adult parasitoids should be pinned. The collection will be evaluated based on the number of different parasitoid-host collected, and the identification level of the host and parasitoid. The student should identify the specimens at least to the family level. The students will be encouraged (not mandatory) to document via short-videos or high quality pictures the process of parasitoid emergence.

Summaries: Weekly summaries are brief syntheses (not outline) of the review paper and should include take home messages. The summary must not exceed one page. There will be a discussion about the review paper every week. The discussion will be led by students.

Term Paper and Presentation: The term paper will consist on six-page document on a subject of biological control relevant to the student thesis or dissertation. For example, if the student is working on an ecology of an invasive chinch bug or a weed targeted for biological control, the paper could include a description of the native range of pest, a history of biological control attempts against this species, a description of the natural enemies known to attack this pest or close relatives, and a review of the management tactics (cultural, chemical controls) that help or interfere with biological control. The student will give a 10-in oral presentation summarizing the findings.

Three exams (150 points each) 450 pts
Three special assignments 200 pts
   - First, 50 points
   - Second, 50 points
   - Third, 100 points
Review paper summaries (10 pts each) 100 pts
Term paper and presentation 250 pts
Total 1,000 pts

Course grading scale
A+ = 97-100%
A  = 94-96%
A- = 90-93%
B+ = 87-89%
B  = 84-86%
B- = 80-83%
C+ = 77-79%
C  = 74-76%
C- = 70-73%
D+ = 67-69%
D  = 64-66%
D- = 60-63%
F  = 0-59%

Academic Integrity and Plagiarism
The students are expected to follow the LSU Academic Integrity Code of Conduct found here:
https://grok.lsu.edu/Article.aspx?articleId=17072
### REQUEST FOR ADDITION OF NEW COURSE

**Department:** Geography and Anthropology  
**College:** Humanities and Social Sciences  
**Date:** March 12, 2015

#### PROPOSED COURSE DESCRIPTION

<table>
<thead>
<tr>
<th>Rubric &amp; No.</th>
<th>ANTH 4200</th>
<th>Title</th>
<th>Human Evolutionary Biology</th>
</tr>
</thead>
</table>

**Short Title (≤ 19 characters):** Human Evolutionary Biology  
**Semester Hours of Credit:** 3

If combination course type, # hrs. of credit for:  
- Lecture: __  
- Lab/Sem/Rec: __

**Repeat Credit Max. (if repeatable):** __ credit hours  
**Graduate Credit?** Yes ☑ No

Credit will not be given for this course and:

- **Course Type (Indicate hours in the appropriate course type):**
  - Lecture: __  
  - Lab: __  
  - Seminar: __  
  - Lecture Recitation: __  
  - Lec/Rec: __  
  - Lec/Sem: __  
  - Lec/Lab: __  
  - Res/Ind: __  
  - Clin/Pract: __  
  - Intern: __

**Maximum enrollment per section: (use integer, e.g. 25 not 20-30)** 20

**Grading System:** Letter Grade X  
**Grade: Pass/Fail ☑**  
**Final Exam:** Yes ☑ No ☑

**Course Description:**  
(Conclude catalog statement exactly as you wish it to appear in the General Catalog)

ANTH 4200 Human Evolutionary Biology (3) Prereq.: ANTH 1001 or permission of Instructor. Seminar. Anatomy, physiology, and behavior of humans in functional, comparative, and evolutionary perspectives.

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#### BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION)

<table>
<thead>
<tr>
<th>If this course is approved, will additional staff be needed?</th>
<th>Yes ☑ No ☑</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will additional space, equipment, special library materials or other major expense be involved?</td>
<td>Yes ☑ No ☑</td>
</tr>
</tbody>
</table>

**Academic Affairs Approval:**

(Attach justification if the proposed course will not hold a final exam during examination week.)

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#### ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)

- **JUSTIFICATION:** Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?
- **SYLLABUS:** Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria

For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students.

---

#### APPROVALS

<table>
<thead>
<tr>
<th>Department Faculty Approval Date</th>
<th>March 13, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Faculty Approval Date</td>
<td>4-28-15</td>
</tr>
</tbody>
</table>

**Department Chair Signature:** (date) 3/24/15  
**Graduate Dean Signature:** (date) 1-22-15

**College Contact:** E-mail

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**Academic Affairs Approval:**

(Attach)

---

**Chair, FSC CAC Committee:** (date) 5-1-15
Justification for addition of ANTH 4200, Human Evolutionary Biology, to curriculum

A. Curricular development

I would like to offer "Human Evolutionary Biology" as ANTH 4200 in spring 2016. The course "Human Evolutionary Biology" is the study of functional, comparative, and evolutionary biology of human anatomy, physiology, and behavior. This course complements other offerings at the 3000 to 7000 level in the subdiscipline of biological anthropology in my department. These other courses include the following: ANTH 3997 (Selected Topics in Anthropology – Bones, Bodies and Disease), ANTH 4010 (Human Osteology), ANTH 4014 (Forensic Anthropology), ANTH 4040 (Physical Anthropology), ANTH 7200 (Human Fertility), and ANTH 7909 (Selected Topics in Anthropology – Paleopathology). In addition to my prior offerings of “Human Evolutionary Biology” under the rubric ANTH 4909 (Undergraduate Seminar in Anthropology; see below), ANTH 3997 and 7909 are “special topics” for which the specific content of the courses is not in the General Catalog and the courses are offered on an ad hoc basis. By having “Human Evolutionary Biology” approved as a course – ANTH 4200 – its specific content will be in the General Catalog, and students will be better apprised that this course will be offered on a regular basis.

“Human Evolutionary Biology” will both integrate some of the content of these different courses listed above (e.g., skeleton, reproductive biology, and fossils) and, importantly, expand content by including other aspects of biology and behavior not covered in those courses, such as endocrinology, respiration, digestion, genetically influenced behaviors, and more. “Human Evolutionary Biology” also provides a different perspective on content in the other courses. For example, I teach Human Osteology primarily from a perspective of functional anatomy; in that course, I do not discuss the fossil evidence for our skeletal anatomy. In “Human Evolutionary Biology,” we discuss not only functional anatomy, but also our anatomy in comparison with other primates and mammals, as well as the fossil record. Broadly, we discuss the panoply of human biology and behavior to understand that evolution is mosaic, with traits evolving at different times and at different rates. This perspective is not covered, at least in any comprehensive manner, in other courses in the department.

I have taught “Human Evolutionary Biology” four times under the rubric of Undergraduate Seminar in Anthropology (ANTH 4909), and my enrollments have ranged from 16 to 22 (Table 2, item D; see below). Therefore, I anticipate that future offerings of this course will be similarly successful in terms of enrollment. Moreover, undergraduate and graduate students are interested in courses in biological anthropology, as evidenced by enrollment figures in these courses (Table 1).
B. Benefit to students

I am one of two faculty members in my department who teach a 4000 level seminar for undergraduate and graduate students. In my class, students help select topics and readings for discussion, and they work collaboratively to lead discussion in class. The seminar experience requires students to prepare in advance for each class session and to think critically about the assigned readings. A typical class period involves discussion of one aspect of anatomy, physiology, or behavior of humans; for example, we may discuss the lower limb (i.e., leg) in one class period. We discuss the functional anatomy and biomechanics of the lower limb in humans in terms of bipedality, and compare our anatomy to that of other primates and mammals in terms of their modes of locomotion. We discuss the fossil evidence for evolution of our lower limb, and we complete discussion of the topic with theories on the evolution of bipedality.

I assign two books for the course to provide a baseline of information for all students, and I suggest additional papers for students to read. Two students are assigned to lead discussion on each topic, and they are expected to read more broadly on that topic than the other students (see syllabus). The lead discussants do not lecture; rather, they guide discussion by asking questions for everyone to consider and selecting the specific issues to discuss. For a particular topic, we compare and contrast studies, including discussion of the data that authors present in their studies and the theories that they advance to explain their results. Every student is encouraged and expected to participate in discussion in each class period, and every student’s statements and opinions are treated with respect. Students also submit two research papers during the semester. I provide extensive editorial suggestions on content and style for both papers, and I expect that the student will incorporate my editorial recommendations from their first paper in the writing of their second paper. Students learn from the class about the anatomy, physiology, and behavior of humans specifically, and of our biology both in comparative perspective with other primates and in the fossil record. The seminar prepares students for graduate and professional school by helping them 1) read professional literature critically, 2) cogently present their interpretations and arguments both orally and in writing, and 3) gain confidence that they can teach themselves almost any subject.

C. Intellectual content of course

The subdiscipline of biological anthropology is the study of humans and other primates in a biological and evolutionary perspective. The foundation of the discipline has been comparative anatomy in an evolutionary context. In recent decades the perspective has broadened to include physiology, genetics, and behavior. The theme of my proposed course on “Human Evolutionary Biology” is mosaic evolution. Broadly stated, mosaic evolution is the concept that various aspects of a species’ biology and behavior evolve at different times, at different rates, and with different modes. The entire suite of anatomies, physiologies, and behaviors that distinguish humans from apes, for example, did not arise at the evolutionary divergence between these two lineages. For example, fossil evidence suggests that the origin of bipedality in our lineage occurred by at least 4.4 million years ago, whereas the origin of large brain size occurred about 2.4 million years ago. My proposed course will discuss the functional anatomy of the human skeleton that enables bipedality, how our skeleton differs from that of apes, the fossil evidence for bipedality, and the theories on why we became bipedal. Similarly, we will discuss the anatomy and physiology of the brain, how the size and function of our brain differ from that of apes, the fossil evidence of increase in brain size in human evolution, and theories on why brain

Page 2 of 15
size increased about 2.4 million years ago and not 4.4 million years ago with the origin of bipedality. This class will cover most aspects of anatomy, physiology, and behavior (those behaviors that are thought to evolve by natural selection); a nonexhaustive list includes the skeleton, digestion, respiration, reproduction, mate selection, and altruism.

D. Previous offerings of course

I have taught this course four times as ANTH 4909, Undergraduate Seminar in Anthropology. As I intend to continue teaching this course every two years (I did not teach the course in spring 2012 because I was on research leave), I would like for the course to be listed in the General Catalog so that students are apprised of its content and regular offering. Table 2 shows enrollment and course evaluations for my four previous offerings of the course. Median enrollment is 21 and median course evaluation is 4.90 (maximum evaluation is 5.0). My course evaluations are uniformly higher than the mean evaluation for all courses in the Department of Geography and Anthropology. Typically, one or two graduate students take the course, and the remainder of students are undergraduates.

Table 2. Enrollment and student evaluations of ANTH 4909 taught by Robert Tague, mean evaluation for all courses taught in the Department of Geography and Anthropology, and maximum score for evaluation

<table>
<thead>
<tr>
<th>Course (ANTH)</th>
<th>Semester</th>
<th>Year</th>
<th>Enrollment (n)</th>
<th>Robert Tague’s evaluation</th>
<th>Students submitting evaluation (n)</th>
<th>Department’s mean evaluation for all courses</th>
<th>Maximum evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4909</td>
<td>spring</td>
<td>2014</td>
<td>22</td>
<td>4.91</td>
<td>17</td>
<td>4.43</td>
<td>5.0</td>
</tr>
<tr>
<td>4909</td>
<td>spring</td>
<td>2010</td>
<td>16</td>
<td>4.90</td>
<td>10</td>
<td>4.33</td>
<td>5.0</td>
</tr>
<tr>
<td>4909</td>
<td>spring</td>
<td>2008</td>
<td>22</td>
<td>4.92</td>
<td>12</td>
<td>4.02</td>
<td>5.0</td>
</tr>
<tr>
<td>4909</td>
<td>spring</td>
<td>2006</td>
<td>20</td>
<td>4.81</td>
<td>14</td>
<td>4.23</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Will course duplicate other courses?

My proposed course – ANTH 4200, “Human Evolutionary Biology” – will not duplicate other courses. Please refer to e-mail messages on the following pages (pp. 6-11) from Drs. Joseph Siebenaller, Melinda Solomon, and Carol Wicks (Chair of Department of Biological Sciences, Director of School of Kinesiology, and Chair of Department of Geology and Geophysics, respectively) that ANTH 4200 will not duplicate any courses that are offered in their departments. The following list is of courses in the 2014-2015 General Catalog that deal with related topics (e.g., human anatomy or evolution), but none of these courses considers the entirety of the content that I propose in my course – anatomy, physiology, and behavior of humans in functional, comparative, and evolutionary perspectives.

**BIOL 2160 Human Physiology (3)**
*Prereq.: BIOL 1001 or BIOL 1201 recommended. May be taken for free elective credit by a student majoring in Biological Sciences, Biochemistry, or Microbiology. Students will not receive credit for both this course and BIOL 4160.*
Elements of human physiology; controls and functions of the various organ systems.

**BIOL 3040 Evolution (3)**
*Prereq.: BIOL 2153. EXST 2201 recommended. Principles and processes in evolutionary biology.*

**BIOL 3152 Comparative Anatomy of the Vertebrates (4)**
*LCCN: CBIO 3234, Comparative Anatomy (Upper Level) Prereq.: BIOL 2153. BIOL 3090 recommended.*
2 hrs. lecture; 6 hrs. lab. Macroevolution, biomechanics and functional anatomy of vertebrates; lab dissection of selected vertebrates.

**GEOL 4111 Vertebrate Paleontology (3)**
*Prereq.: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Phylogenetic survey of fossil vertebrates; their origins and transitions; vertebrate taphonomy, biostratigraphy and fossil collection and preparation.*

**GEOL 7911 Seminar in Geology: Paleontology (2)**
*May be repeated for credit.*

**KIN 2500 Human Anatomy (3)**
Micro and macroscopic study of the human body.

**KIN 3500 Human Anatomy Laboratory (1)**
*Prereq.: KIN 2500 or consent of instructor. Computer based study. 2 hrs. lab. Interactive software of the human body; gross anatomy with emphasis on muscle, bone, nerve and blood vessels.*
KIN 3514 Biomechanical Basis of Kinesiology (3)
Prereq.: MATH 1022, KIN 2500, PHYS 2001 or equivalent. Education majors only. Anatomical and mechanical analysis of human movement; emphasis on structure and function of bone and muscle, statics, dynamics, kinematics, kinetics and projectile motion.
Re: proposed addition of new course, ANTH 4200; request letter from you stating that this course does not duplicate any courses in Dept. of Biological Sciences

Joseph F Siebenaller

Mon 3/23/2015 4:50 PM

To Robert G Tague <rtague@lsu.edu>

Bob,
Your proposed course ANTH 4200 was reviewed by our courses and curricula committee and ANTH 4200 does not duplicate any course offered by Biological Sciences.
Best wishes,
Joe

On 3/16/2015 1:08 PM, Robert G Tague wrote:

Dear Dr. Siebenaller,

I am proposing addition of a new course in my department – ANTH 4200, “Human Evolutionary Biology.” The faculty in my department voted to approve this proposal on March 13, 2015. I am attaching the proposal, which includes a sample syllabus, as an attached document to this e-mail message. I will be appreciative if you could send a brief e-mail message to me stating that this course does not duplicate any course that your faculty offer. I will include your e-mail message in my submission packet to the Courses and Curricula Committee. I can identify the following courses in your department from the General Catalog for which related topics would be taught in my ANTH 4200 course and your courses: BIOL 2160, 3040, and 3152. However, I believe that the overall course content and theme of discussion differ meaningfully between ANTH 4200 and your courses. Thanks for considering my request.

Best regards,
Bob

Robert G. Tague
Earleene Nolan Sanders Alumni Professor
Department of Geography and Anthropology
LSU

e-mail address: rtague@lsu.edu
office telephone: 578-6094
office fax: 578-4420
RE: proposed addition of new course, ANTH 4200; request letter from you stating that this course does not duplicate any courses in School of Kinesiology

Melinda A Solmon
Mon 3/16/2015 2:38 PM
Inbox
To: Robert G Tague <rtague@lsu.edu>;

Dear Dr. Tague,

Thank you for checking with me. I have conferred with the instructors of the courses you listed below, and I have reviewed the course proposal. Although there is some duplication of topics, we all agree with your belief that the overall course content and theme of discussion are meaningfully different than our courses. We have no opposition to the course proposal.

Melinda A. Solmon, Ph.D.
Roy Paul Daniels Professor and Director
School of Kinesiology
Louisiana State University
Baton Rouge, LA 70803
Phone: 225-578-2639
Fax: 225-578-3680
E-mail: msolmo1@lsu.edu

From: Robert G Tague
Sent: Monday, March 16, 2015 1:18 PM
To: Melinda A Solmon
Subject: proposed addition of new course, ANTH 4200; request letter from you stating that this course does not duplicate any courses in School of Kinesiology

Dear Dr. Solmon,

I am proposing addition of a new course in my department — ANTH 4200, “Human Evolutionary Biology.” The faculty in my department voted to approve this proposal on March 13, 2015. I am attaching the proposal, which includes a sample syllabus, as an attached document to this e-mail message. I will be appreciative if you could send a brief e-mail message to me stating that this course does not duplicate any course that your faculty offer. I will include your e-mail message in my submission packet to the Courses and Curricula Committee. I can identify the following courses in your department from the General Catalog for which related topics would be taught in my ANTH 4200 course and your courses: KIN 2500, 3500, and 3514. However, I believe that the overall course content and theme of discussion differ meaningfully between ANTH 4200 and your courses. Thanks for considering my request.
Best regards,
Bob

Robert G. Tague
Earleene Nolan Sanders Alumni Professor
Department of Geography and Anthropology
LSU

e-mail address: rtague@lsu.edu
office telephone: 578-6094
office fax: 578-4420
Dear Dr. Tague,

The proposed course (ANTH4200) does not duplicate any courses within GEOL.

The proposed course (GEOG4200) would complement the existing course GEOL4111 as GEOL4111 focuses on development over geologic time (the fossil record) and ANTH4200 focuses on more recent times. The proposed course will NOT overlap with GEOL7911 as GEOL7911 is a specialized graduate-level seminar.

Carol M. Wicks

225-578-2692 (office)
225-223-8187 (cell)
Chair and Frank W. and Patricia Harrison Family Professor
Department of Geology and Geophysics
E235 Howe-Russell-Kniffen Geoscience Complex
College of Science
Louisiana State University
Baton Rouge LA 70803

From: Robert G Tague
Sent: Monday, March 16, 2015 1:12 PM
To: Carol Wicks
Subject: proposed addition of new course, ANTH 4200; request letter from you stating that this course does not duplicate any courses in Dept. of Geology and Geophysics

Dear Dr. Wicks,

I am proposing addition of a new course in my department – ANTH 4200, “Human Evolutionary Biology.” The faculty in my department voted to approve this proposal on March 13, 2015. I am attaching the proposal, which includes a sample syllabus, as an attached document to this e-mail message. I will be appreciative if you could send a brief e-mail message to me stating that this course does not duplicate any course that your faculty offer. I will include your e-mail message in my submission packet to the Courses and Curricula Committee. I can identify the following courses in your department from the General Catalog for which related topics would be taught in my ANTH 4200 course and your courses: GEOL 4111
and 7911. However, I believe that the overall course content and theme of discussion differ meaningfully between ANTH 4200 and your courses. Thanks for considering my request.

Best regards,
Bob

Robert G. Tague
Earleene Nolan Sanders Alumni Professor
Department of Geography and Anthropology
LSU

e-mail address: rtague@lsu.edu
office telephone: 578-6094
office fax: 578-4420
Proposed course will not hold a final exam during examination week.

Justification:

This course is a seminar. Students are expected to read both in breadth and depth on a large number of topics. They are graded on general participation in class discussion, being lead discussant two or three times (undergraduate and graduate students, respectively), and two research papers. The students' second research paper should demonstrate a holistic understanding of the course. This second research paper is submitted on the date of the final exam during examination week, and this paper constitutes their final exam.
Sample syllabus: Syllabus used in spring 2014 offering of course listed as ANTH 4909

Human Evolutionary Biology (ANTH 4909, section 1)
Spring Semester 2014

I. Information about instructor

Instructor: Dr. Robert G. Tague
Office: 255 Howe-Russell-Kniffen Geoscience Complex
Telephone: 578-6094
E-mail: rtague@lsu.edu
Office hours: 1:40-2:40 p.m. Tuesday and Thursday, and by appointment

Electronic communication between instructor and students: I will use Moodle to post electronically information pertaining to the course (e.g., syllabus, announcements, and class materials). In any e-mail communication between you and me, please include “ANTH 4909” at the beginning of the subject heading of the message.

II. Learning objectives

The learning objectives of the Bachelor of Arts major in Anthropology at LSU are to instill in our students the following: (1) a capacity to construct and evaluate arguments in light of anthropological evidence; (2) an understanding of continuity and change in humans and their cultures; (3) awareness of the diversity of humans and their cultures; (4) an ability to examine a variety of sources critically and to analyze them in terms of their contexts; (5) the capacity to evaluate humans and their culture in light of anthropological evidence; and (6) an awareness of complexity of humans and their culture.

III. Course management

Class period is 10:30 to 11:50 a.m. on Tuesday and Thursday. If you arrive late for class, please do not hesitate to enter the classroom; come in and join us for the discussion. If you know in advance that you need to leave before the end of class, please sit near the door so that you can leave without much disruption. At the beginning of class, please set cell phones to either “silent” or a low ring tone. I understand that some students need to have their cell phones turned “on” because they may receive an important call or text message. For example, I set my cell phone to a low ring tone in case my daughter needs to contact me.

Class will not be held on the following dates: March 4 (Mardi Gras), April 15 and April 17 (spring break).


Course format: This course is a seminar, meaning that you (the students) are expected to be active participants in the course. You are expected to read the assigned materials before class, and be prepared to participate in the class discussion.

Evaluation: There are three components to the evaluation: (1) participation in class discussion, (2) lead discussant, and (3) research papers. The contribution of each component to your final semester grade is as follows: participation in class discussion – 25%; lead discussant – 25%; and research papers – 50%.

1. Participation in class discussion.
All students are expected to participate regularly in class discussion. For each class period, I will record whether you: (1) attend class and (2) say something during class germane to the topic. I will also record how many times during each class that you participate in discussion. For each class period, each student who is not a lead discussant for that day will earn from zero to four points – zero points for absence, one point for attendance but not saying anything related to the
Contribution to discussion

2. Lead discussant.

Each undergraduate student will be a "lead" discussant two times during the semester; each graduate student will be lead discussant three times. Two students (or one student and Tague) will be lead discussants for each class period. For a class session in which you are a lead discussant, you will read both material assigned to all students for that session and an additional three articles of your choosing that pertain to the topic of discussion for that day. As lead discussant, you will guide the discussion but not give a lecture. That is, you will introduce the principal topics and issues in the assigned readings and pose questions for the other students to discuss. You will integrate the additional readings that you choose into the general discussion. Your grade for being lead discussant will be based on your manner of presentation and knowledge of the subject material. For undergraduate students, your higher grade for the two times that you are lead discussant will contribute 15% to your semester grade, and your lower grade for being lead discussant will contribute 10% to your semester grade. For graduate students, each of your opportunities to be lead discussant contributes 8.33% to your semester grade.

3. Research papers.

Each student will write two research papers on any topic that (s)he chooses pertaining to human evolutionary biology. The topics of the papers can be the same topics for which you are lead discussant, and the topic must be approved by me (that is, meet with me to discuss your paper topic). The paper can be a research prospectus or a critical review of the literature. The paper is expected to be 8 to 10 pages in length for undergraduate students, and 10 to 12 pages in length for graduate students. The first paper is due April 3 by 11:50 a.m., and the second paper is due May 6 by 9:30 a.m. (which is the date and time of the final exam). I will subtract two percentage points (out of a possible 100%) for each day that the paper is late in submission. Your grade on these research papers will be based, in part, on the degree to which you demonstrate mastery of the learning objectives listed above (see II. Learning objectives). For undergraduate students, your higher grade for the two papers will contribute 30% to your semester grade, and your lower grade for the two papers will contribute 20% to your semester grade. For graduate students, each paper contributes 25% to your semester grade.

Please type the two research papers, double space the text, and give me a printed copy of the text. Undergraduate students need to provide me with digital copies of the papers in addition to the printed copies. I recommend that you use the format in the American Anthropologist, American Journal of Physical Anthropology, or the Journal of Human Evolution for citations within the text and in Literature Cited. Edit your papers. I grade equally on content and composition.

<table>
<thead>
<tr>
<th>Course component</th>
<th>Total contribution to semester grade</th>
<th>Undergraduate students</th>
<th>Graduate students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to class discussion</td>
<td>25%</td>
<td>12% for highest grade of the three sections of the course; 8% for second highest grade of the three sections of the course; and 5% for lowest grade of the three sections of the course</td>
<td>8.33% for each of the three sections of the course</td>
</tr>
<tr>
<td>Lead discussant</td>
<td>25%</td>
<td>15% for higher grade as lead discussant, and 10% for lower grade as lead discussant</td>
<td>8.33% for each session as lead discussant</td>
</tr>
</tbody>
</table>
Grades: Grades for the class may be curved for undergraduate students. If the class mean/median for undergraduate students is below 83%, I will curve the grades to reach a mean/median of 83%; if both the class mean and median are greater than or equal to 83%, then no curve will be applied. There is no curve for graduate students.

The semester letter grades will be assigned based on the following semester numerical grades:

- 89.5 – 100.0 A
- 79.5 – 89.4 B
- 69.5 – 79.4 C
- 59.5 – 69.4 D
- 0 – 59.4 F

Tentative sequence of topics and associated readings are below. Be flexible to possible changes in dates, topics, and readings.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Lead discussant</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>Introduction</td>
<td>Langdon, chapter number</td>
<td>Tague</td>
</tr>
<tr>
<td>January 21</td>
<td>Evolution and adaptation</td>
<td>1</td>
<td>1 and 2</td>
</tr>
<tr>
<td>January 23</td>
<td>Genetics</td>
<td>2</td>
<td>Tague</td>
</tr>
<tr>
<td>January 28</td>
<td>Classification and hominin evolution</td>
<td>3</td>
<td>Tague</td>
</tr>
<tr>
<td>January 30</td>
<td>Bones, joints, muscles</td>
<td>4</td>
<td>Tague</td>
</tr>
<tr>
<td>February 4</td>
<td>Skull</td>
<td>7</td>
<td>students</td>
</tr>
<tr>
<td>February 6</td>
<td>Teeth</td>
<td>8</td>
<td>students</td>
</tr>
<tr>
<td>February 11</td>
<td>Spine</td>
<td>9</td>
<td>students</td>
</tr>
<tr>
<td>February 13</td>
<td>Upper limb</td>
<td>10</td>
<td>students</td>
</tr>
<tr>
<td>February 18</td>
<td>Lower limb</td>
<td>11</td>
<td>students</td>
</tr>
<tr>
<td>February 20</td>
<td>Bipedalism</td>
<td>12</td>
<td>students</td>
</tr>
<tr>
<td>February 25</td>
<td>Organization of brain</td>
<td>13</td>
<td>students</td>
</tr>
<tr>
<td>March 6</td>
<td>Special senses</td>
<td>14</td>
<td>students</td>
</tr>
<tr>
<td>March 11</td>
<td>Skin</td>
<td>15, 16, and 17</td>
<td>students</td>
</tr>
<tr>
<td>March 13</td>
<td>Digestion and diet</td>
<td>18</td>
<td>students</td>
</tr>
<tr>
<td>March 18</td>
<td>Respiration, circulation, excretion</td>
<td>19</td>
<td>students</td>
</tr>
<tr>
<td>March 20</td>
<td>Energy flow, homeostasis</td>
<td>20</td>
<td>students</td>
</tr>
<tr>
<td>March 25</td>
<td>Reproduction</td>
<td>21</td>
<td>students</td>
</tr>
<tr>
<td>March 27</td>
<td>Sex and human evolution</td>
<td>22</td>
<td>students</td>
</tr>
<tr>
<td>April 1</td>
<td>Life history</td>
<td>23</td>
<td>students</td>
</tr>
<tr>
<td>April 3</td>
<td>Markers of human variation</td>
<td>24</td>
<td>students</td>
</tr>
<tr>
<td>April 8</td>
<td>Male reproduction; hormonal responses in the child</td>
<td>25, 30, and 31</td>
<td>students</td>
</tr>
<tr>
<td>April 10</td>
<td>Infectious and chronic diseases</td>
<td>26, 27, and 28</td>
<td>students</td>
</tr>
<tr>
<td>April 22</td>
<td>Energetics and the brain; longevity and senescence</td>
<td>29, 30, and 31</td>
<td>students</td>
</tr>
<tr>
<td>April 24</td>
<td>Thesis research by graduate students</td>
<td>30, 31, and 32</td>
<td>students</td>
</tr>
<tr>
<td>April 29</td>
<td>Demography; embodied capital and extra-somatic wealth</td>
<td>33, 34, and 35</td>
<td>Tague</td>
</tr>
<tr>
<td>May 1</td>
<td>Evolutionary psychiatry; industrial pollutants; acculturation and health</td>
<td>36, 37, and 38</td>
<td>Tague</td>
</tr>
</tbody>
</table>
**REQUEST FOR ADDITION OF NEW COURSE**

**Department:** Construction Management  
**College:** Engineering  
**Date:** 3/1/2015

### PROPOSED COURSE DESCRIPTION

<table>
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<tr>
<th>Course Type (Indicate hours in the appropriate course type.)</th>
<th>Lecture</th>
<th>Lab</th>
<th>Seminar</th>
<th>Recitation</th>
<th>Lec/Rec</th>
<th>Lec/Sem</th>
<th>Lec/Lab</th>
<th>Res/Ind</th>
<th>Clin/Pract</th>
<th>Intern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit will not be given for this course and:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Course Type (Indicate hours in the appropriate course type.)</strong></td>
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<td></td>
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</tr>
</tbody>
</table>

**Repeat Credit Max. (If repeatable):**  
Credit for this course will only be given once for either online or traditional delivery method.

**Course Description:**

CM 7303 – Environmental Life Cycle Assessment (3) Prereq.: Life Cycle Assessment (LCA) as a science-based technique to guide policy and decision making that enhances sustainability. Computational structure and data sources for SETAC LCA; Input-output LCA and Hybrid LCA as tools to select a superior alternative on the basis of pollution prevention and resource conservation.

**Grading System:**  
Letter Grade: ___  
Pass/Fail: ___  
Final Exam:** Yes ___  
No ___

**BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION.**

**If this course is approved, will additional staff be needed?** Yes ___  
No ___

**Will additional space, equipment, special library materials or other major expense be involved?** Yes ___  
No ___

**Academic Affairs Approval:** (Date)

**ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)**

**JUSTIFICATION:** Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?  
**SYLLABUS:** Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria  
(For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students).

**APPROVALS**

**Department Faculty Approval Date:** 03/12/15  
**College Faculty Approval Date:** 04/20/15  
**Department Chair Signature:** (date)  
**Graduate Dean Signature:** (date)  
**Chair, FS C&G Committee Signature:** (date)
CM 7303-01 – Environmental Life Cycle Assessment

Justification
The CM Department at LSU needs to provide its students with a series of graduate courses in sustainability to teach future industry professionals how to manage our current needs without compromising the needs of the future generations. To achieve this end, we already offer CM 7302 sustainable construction and we propose to offer this course in LCA. This course will teach the students tools that are used to measure sustainability of products and systems.

Furthermore the addition of this course will be used by the graduate faculty to enhance their areas of expertise. It will also give the faculty an opportunity to select graduate students for research in the area of life cycle assessment.

We have one undergraduate course on the topic CM 4303 LCA. The undergraduate course covers the basic concepts. The proposed course covers in depth topics as it includes a graduate level project as described in the syllabus. The undergraduate course CM 4303 or EV 4154 can be used as prerequisites.

Currently there are no graduate courses offered in this area, therefore the faculty feels that it would be beneficial to the students to offer course work in this area.
CM 7303-01 – Environmental Life Cycle Assessment

TERM : Fall 2015

FACULTY : Marwa Hassan
marwa@lsa.edu

OFFICE HOURS : 7.00-9.00 Monday, Tuesday, Wednesday, Thursday, or by appointment

WEBSITE : Moodle will be used for course contents

CATALOG COURSE DESCRIPTION : CM 7303 (3 credit hours) – Environmental Life Cycle Assessment
3003 Life Cycle Assessment (3) Prereq.: CM 4303 or EVEN 4154 or consent of instructor. Life Cycle Assessment as a science-based technique to guide policy and decision making that enhances sustainability. Computational structure and data sources for SETAC LCA, Input-output LCA and Hybrid LCA as tools to select a superior alternative on the basis of pollution prevention and resource conservation.

(EXPANDED) : Life Cycle Assessment (LCA) is a science-based technique used to measure and quantify a product’s environmental performance to define opportunities for improvements or select a superior alternative on the basis of pollution prevention and resource conservation. It can be used to guide policy and decision making that enhances sustainability. The computational structure and data sources for environmental Life Cycle Assessment are presented and discussed. For 7 week online formats, this course requires 20 hours of study time per week. For Traditional 14 week format, each hour of contact time class is equivalent to three hours of study time out of class.

COURSE OBJECTIVES : • Understand the concepts and framework of environmental Life Cycle Assessment and the challenges involved.
• Compare Life Cycle Assessment (LCA) to other environmental tools and product claims (e.g. Carbon Footprinting, Environmental Product Declarations, Risk Assessment).
• Explain & Use tools and practice opportunities for environmental Life Cycle Assessment (LCA) to assess the environmental impact of products and systems over the whole product life cycle, from cradle to grave.
• Define fundamentals for comparative risks on humans and ecosystems and their use in life cycle approaches.

COURSE OUTCOMES : Upon successful completion of this course, the student will be able to:
• Prioritize and develop system boundaries and functional units for LCA of a product or process
• Build a life cycle inventory and conduct an environmental impact assessment using state of the art models and tools.
• Evaluate the environmental and human health impacts of a product or process, identifying the area of major impact and of its potential reduction for a consumer.
• Properly document and report LCA results through understanding the assumptions, strengths, and limitations of the various assessment tools.
• Sit for the exam for Life Cycle Assessment Certified Professionals
GRADING POLICY:

- Final Project Report: 30%
- Exams: 40%
- Homework: 20%
- Class participation and Quizzes: 10%

GRADE SCALE:

- A+: > 95
- A: > 92 - ≤ 95
- A-: > 88 - ≤ 92
- B+: > 85 - ≤ 88
- B: > 82 - ≤ 85
- B-: > 78 - ≤ 82
- C+: > 75 - ≤ 78
- C: > 72 - ≤ 75
- C-: > 68 - ≤ 72
- D+: > 65 - ≤ 68
- D: > 62 - ≤ 65
- D-: > 58 - ≤ 62
- F: ≤ 58

COURSE MATERIALS AND RESOURCES:

  - American Center for Life Cycle Assessment.

Other reading materials: papers & handouts will be posted online.

DEPARTMENT POLICIES:

1. No make-up exams are allowed except for cases and excuses defined by the university regulations. In these cases a new make-up exam will be given to the student and proctored by the instructor.
2. Students are expected to watch all lectures.
3. In-class participation and questions are encouraged. They may positively influence grading decisions in borderline cases.
4. Academic dishonesty will be dealt with according to university regulations and policy. It is each student’s responsibility to understand these regulations.

PROJECT DESCRIPTION:

Your project will be a LCA that recommends improvement opportunities for a life cycle of a system of your choosing. HOWEVER:

- You may not recreate an existing LCA (this means you must start with a literature review including BOTH a journal and web search)
- You may choose from one of the following types of projects:
  - Type a. prepare an attributional or consequential LCA on a product or production process that has not yet been assessed
  - Type b. use an existing LCA as the basis for an assessment of process alternatives or a set of impacts that have not previously been assessed THROUGHOUT THE LIFE CYCLE (e.g., a water-footprint, a landuse-footprint, etc.)
  - Type c. change the geographic specificity of an existing LCA, as long as this includes an update of technology practices THROUGHOUT THE LIFE CYCLE (e.g., you may move an existing LCA representing operations in Europe to operations in the US, but you will need to ensure the technology representation is appropriate)
  - Type d. prepare a consequential LCA, based on an existing attributional LCA
- All project proposals must be approved by the instructor
  - Projects may or may not be built around a parametric model of a product or production process, giving you the ability to vary important operating parameters

You may work in groups of 2 or 3.
During the semester, you will submit a proposal, several interim reports, and a final report:

**Proposal:** Your 2-page proposal should include:
- An introduction describing the specific system you will evaluate and why you have chosen it (e.g., it is related to your thesis or dissertation, it is related to your current job or career goals, it is related to an environmental question you have had for some time, etc.)
- *for project type a:* a list and description of your proposed LCA including
  - the proposed type of LCA (attribu
tional or consequential)
  - geographic specificity (what region will you study?-- the US?)
  - a hierarchical list of unit processes to be included in the life cycle (use abbreviations as needed, such as "the life cycle of aluminum production")
  - a hierarchical list of what will be tracked in the impact assessment (such as "the contribution to climate change") and a statement on why you have chosen these impacts (references are appropriate here)
- *for project types b-d:* a list and description of existing and related LCAs including
  - the type of LCA (attributio
tonal or consequential)
  - geographic specificity (what is the region of study?-- it may be the globe)
  - the functional unit
  - a hierarchical list of included unit processes (use abbreviations as needed, such as "primary aluminum production from bauxite")
  - a hierarchical list of what is tracked in the inventory analysis (use abbreviations as needed, such as "greenhouse gases: CO2, CH4, N2O")
  - a hierarchical list of what is tracked in the impact assessment (such as "the contribution to acidification")
  - a list of data sources used for both inventory analysis and impact assessment
  - comparisons made
  - conclusions drawn
  - Note that you may want to include a summary table as an appendix to your proposal which does not need to comply with the page limit
- **identification and justification of the proposed project type** (select from the 4 project types listed above: type a - type d), based on the information found in your review of existing and related LCAs
- the references used, formatted as described at http://wally.rit.edu/pubs/guides/apa.html

**Interim Reports**

**Part 1. Goal and scope definition.** The structure of your goal and scope report is described in the ISO Standards. Specifically, you will need to define the goal and scope of the study; define the function, functional unit, and reference flows; define the initial system boundaries (including process flow diagrams depicting major material flows); describe the data quality requirements and scoring method; and make recommendations for critical review. You must also include a brief description of the LCA methodology and a review of existing related LCAs as may have been included in your proposal. All citations should be complete as described at http://wally.rit.edu/pubs/guides/apa.html

**Part 1A Data gaps analysis -** Develop a table listing the unit processes in the life cycle and the data sources available for each.

**Part 2. Inventory analysis.** Use the ISO Standards as a guide in the preparation of your inventory analysis. Note that you must include all unit process data keyed to a process flow diagram(s). Computational procedures used when the basic inventory model fails must be described. Your technology matrix, demand vector, scaling vector, and result vector must be included in an appendix and must be referred to in the text. All citations should be complete as described at http://wally.rit.edu/pubs/guides/apa.html

**Part 3. Impact assessment.** Your impact assessment must include characterization and normalization and may also include valuation. All citations should be complete as described at http://wally.rit.edu/pubs/guides/apa.html

**Final Report**

Your final report must combine all interim reports and add two final parts:

**Part 4. Interpretation.** The findings from your inventory analysis and impact assessment should be evaluated on the basis of completeness, sensitivity, and consistency of the data.

**Part 5. Recommendations.** The conclusion of your report should support recommendations for resource conservation and pollution prevention.
Course Policies:

- All assigned work is due at the BEGINNING of class time on the due date. LATE WORK WILL NOT BE ACCEPTED. INDIVIDUAL EFFORT IS EXPECTED AND ANY INFRINGEMENTS WILL BE STRICTLY DEALT WITH ACCORDING TO UNIVERSITY REGULATIONS.
- Do not be shy to ask even the simplest questions because that is the only way to guarantee an explanation.
- Do not hesitate to contact me regarding any matter pertaining to this course. Especially if you are having a problem with any part of the course or its prerequisite, please bring it to my attention as soon as possible so I can give you the assistance you need.

University Policies and Services:

Office of Disability Services
If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please see a staff member in the Office of Disability Services (112 Johnston Hall) so that such accommodations can be considered. Students that receive accommodation letters, please meet with me to discuss the provisions of those accommodations as soon as possible.
<table>
<thead>
<tr>
<th>Week</th>
<th>Materials Covered (in online 7 week format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction and Expectations</td>
</tr>
<tr>
<td></td>
<td>Risks and Impacts of Consumption - Why LCA?</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to LCA - What is LCA?</td>
</tr>
<tr>
<td></td>
<td><strong>Case Study Introduction Example</strong></td>
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<tr>
<td>3</td>
<td>Unit Processes Models</td>
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<td></td>
<td>Goal and Scope</td>
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<tr>
<td>4</td>
<td>Advanced System Modelling</td>
</tr>
<tr>
<td></td>
<td><strong>Goal and Scope Case Study</strong></td>
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<tr>
<td>5</td>
<td>Data Quality</td>
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<td></td>
<td>Input-Output</td>
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<tr>
<td>6</td>
<td>Advanced System Modelling</td>
</tr>
<tr>
<td></td>
<td><strong>Data Sources &amp; Case Study</strong></td>
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<tr>
<td>7</td>
<td>Impact Assessment</td>
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<td></td>
<td>Life Cycle Impact Assessment</td>
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<tr>
<td>8</td>
<td>Decision Support calculations</td>
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<td><strong>Case Study - Impact Assessment</strong></td>
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<tr>
<td>9</td>
<td>Interpretation</td>
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<td>Bias and Uncertainty</td>
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<td><strong>Case Study - Interpretation</strong></td>
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<td>11</td>
<td>Communication of LCA Results</td>
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<td>LCA-Based Product Claims</td>
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<td>12</td>
<td><strong>Case Study - EPD</strong></td>
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<td></td>
<td>Ethics</td>
</tr>
<tr>
<td>13</td>
<td>How to Conduct LCA</td>
</tr>
<tr>
<td>14</td>
<td>Parallel Life cycle Methods</td>
</tr>
</tbody>
</table>
Dear Anna;

Thanks for your comments. They are very helpful; Please see answers to your questions:

1. Has this been offered before as a special topics course? If so, how many times and what enrollment numbers?

   No, it has not. It will be offered for the first time in the second fall module. It is part of the MSCM online program so we feel that we need it to be a regular course before we offer it, not a special topics course.

2. I noticed that there is a 4000 level course of the same topic, the justification should address this and show how it differs.

   The undergraduate 4000 level course covers the basic concepts. This course covers in depth topics and it includes a graduate level project as described in the syllabus. The undergraduate course CM 4303 or EVG 4154 can be used as prerequisites. This was added to the justification.

3. The syllabus needs to be revised to show the out of class expectations (the for every hour in class, you spend this many hours out of class….), the discussion, homework, and participation grading criteria must be described in full as well.

   The course will be offered as an online 7 week course so it requires 20 hours per week of study time. In the standard 14 week format, each hour of class is equivalent to three hours of study time out of class as it is a three hour course. Please find an updated copy of the syllabus.

Please find attached a modified copy of the syllabus and justification. Please let me know if you need anything else.

Thanks;

Marwa Hassan, Ph.D., PE Civil (VA), LEED AP BD+C, M. ASCE
Graduate Coordinator
CETF Distinguished Associate Professor
Department of Construction Management
College of Engineering
3128 Patrick Taylor Hall
Louisiana State University
Baton Rouge, LA 70803
Tel: (225) 578-9189
URL: http://www.cm.lsu.edu/people/faculty/facstaff/marwa.hassan

Steph
Begin forwarded message:

From: Anna M Castrillo <acastrl1@lsu.edu>
Date: April 27, 2015 at 1:11:38 PM CDT
To: Stephanie G Heumann <sheumann@lsu.edu>
Subject: eM 7303 proposal

Stephanie,

I have reviewed the CM 7303 proposal and need the following revised:

1. Has this been offered before as a special topics course? If so, how many times and what enrollment numbers?
2. I noticed that there is a 4000 level course of the same topic, the justification should address this and show how it differs.
3. The syllabus needs to be revised to show the out of class expectations (the for every hour in class, you spend this many hours out of class...), the discussion, homework, and participation grading criteria must be described in full as well.

Sincerely,

Anna Castrillo, M.A.
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225)578-4111
Fax: (225)578-5991
### PROPOSED COURSE DESCRIPTION

<table>
<thead>
<tr>
<th>Rubric &amp; No.</th>
<th>COMD 7282</th>
<th>Title</th>
<th>Acquired Neurogenic Cognitive-Communicative Disorders</th>
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<tbody>
<tr>
<td>Short Title (≤ 19 characters)</td>
<td>A C Q D N E U R C O G C O M</td>
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<tr>
<td>Semester Hours of Credit</td>
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<td>If combination course type, # hrs. of credit for Lecture:</td>
<td>Lab/Sem/Rec:</td>
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<tr>
<td>Repeat Credit Max. (if repeatable):</td>
<td>credit hours</td>
<td>Graduate Credit?</td>
<td>Yes</td>
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<tr>
<td>Course Type (Indicate hours in the appropriate course type.)</td>
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<td></td>
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<tr>
<td>Lecture</td>
<td>Lab</td>
<td>Seminar</td>
<td>Recitation</td>
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<tr>
<td>Maximum enrollment per section: (use integer, e.g. 25 not 20-30)</td>
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<td></td>
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<tr>
<td>Grading System:</td>
<td>Letter Grade</td>
<td>Pass/Fail</td>
<td>Final Exam:**</td>
</tr>
<tr>
<td><strong>(Attach justification if the proposed course will not hold a final exam during examination week.)</strong></td>
<td></td>
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</table>

**Course Description:**

(Concise catalog statement exactly as you wish it to appear in the General Catalog)

COMD 7282 Acquired Cognitive-Communicative Disorders (3). Neuroscience, assessment, and treatment of acquired neurogenic cognitive communicative disorders (TBI and RHD)

### BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION.)

If this course is approved, will additional staff be needed? Yes | No |
Will additional space, equipment, special library materials or other major expense be involved? Yes | No |

Academic Affairs Approval:

### ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?
SYLLABUS: Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria
(For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students).

### APPROVALS

<table>
<thead>
<tr>
<th>Department Faculty Approval Date</th>
<th>November 13, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Faculty Approval Date</td>
<td>4-22-15</td>
</tr>
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<table>
<thead>
<tr>
<th>Department Chair Signature</th>
<th>4-6-15</th>
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<tr>
<td>Graduate Dean Signature</td>
<td>4-22-15</td>
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<table>
<thead>
<tr>
<th>College Contact</th>
<th>E-mail</th>
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</thead>
<tbody>
<tr>
<td>College Dean Signature</td>
<td></td>
</tr>
<tr>
<td>Chair, FS C&amp;C Committee</td>
<td></td>
</tr>
<tr>
<td>Academic Affairs Approval</td>
<td></td>
</tr>
</tbody>
</table>

| Effective: | 3/2015 |
Justification

The COMD masters degree is designed to meet the educational needs of students seeking to become nationally-certified, speech-language pathologists who must be knowledgeable about the nature and characteristics of, as well as competent in the practice of the prevention of, and assessment/intervention for communication disorders across the lifespan. The current course structure related to communication disorders of adults who have suffered brain damage was constructed in the early 1980s to consist of a sequence starting with the study of the neuroanatomy/physiology of communication (COMD 7280 Neuroanatomical Bases of Speech and Hearing) leading to neurologically-based, acquired disorders of speech (COMD 7385 Neuropathologies of Speech) and language (COMD 7387 Aphasia in Adults). In the intervening time theoretical models of these disorders and the role of speech-language pathologists have broadened to include a range of cognitive processes and systems (e.g., attention, perception, memory, organization, and executive function) that interact with language, speech, and communication.

The course changes proposed here seek to expand the focus on cognitive processes and systems by instituting a new course sequence including COMD 7281 Acquired Neurogenic Language Disorders followed by COMD 7282 Acquired Neurogenic Cognitive-Communicative Disorders and COMD 7385 Neuropathologies of Speech. Each of these three courses will include discussion of the essential neuroanatomical/physiological components serving the particular cognitive systems and disorders addressed in the class, thus eliminating the need for COMD 7280.

Specific Course Changes

Drop COMD 7280 Neuroanatomical Bases of Speech and Hearing.

The knowledge attained in this course will be spread out over the beginning of the disorders classes: COMD 7281 Acquired Neurogenic Language Disorders and COMD 7282 Acquired Neurogenic Cognitive-Communicative Disorders. We anticipate that this will result in better student learning because they will see a more immediate practical payoff for the acquisition of this knowledge as a part of the disorders courses. Students will learn about the specific neurology serving particular disorders just before using that knowledge in understanding the nature, characteristics, assessment and intervention for each disorder.

Drop COMD 7387 Aphasia in Adults.

The knowledge attained in this course will be moved to the new class, COMD 7281 Acquired Neurologic Language Disorders.

Add COMD 7281 Acquired Neurogenic Language Disorders

This class presents the nervous system structures that serve the communicative functions that are disrupted in aphasia and dementia as well as the etiologies of damage to these systems and changes over time that result from central nervous system damage. Students will learn how to administer and interpret appropriate measurement of these systems and how to develop and evaluate intervention plans.
Add COMD 7282 Acquired Neurogenic Cognitive-Communicative Disorders

This class presents the central nervous system structures that serve the communicative functions that are disrupted by traumatic brain injury and right hemisphere disorders (social language use, attention, and memory) as well as the etiologies of damage to these systems and changes over time that result from central nervous system damage. Students will learn how to administer and interpret appropriate measurements of these systems and how to develop and evaluate intervention plans.
COMD 7282 ACQUIRED NEUROGENIC COGNITIVE-COMMUNICATIVE DISORDERS

COURSE SYLLABUS

Neila J. Donovan, Ph.D., CCC-SLP
Department of Communication Sciences and Disorders
72 Hatcher Hall
Baton Rouge, LA 70803
Phone: 225-578-3938
Email: ndonovan@lsu.edu
Office Hours: Wednesdays 4:30 – 6:30 or by appointment

COURSE DESCRIPTION

1. This course has two broad purposes:
   a. To broaden the foundational knowledge learned in COMD 7281 on the central nervous system’s neuroscience and neuroanatomy as it relates to sensory/motor and cognitive process in speech, cognitive-communicative, and hearing as they relate to traumatic brain injury (TBI) and right hemisphere cognitive-communicative disorders (RHD).
   b. To provide you with the requisite information needed to begin assessing and treating individuals with acquired neurologic cognitive and communicative disorders that result from TBI and RHD. Students will learn through assigned reading, lectures, discussion, assignments, and class projects. Clinical case presentations, including case history, neurological exam results, and behavioral observation will be used to develop basic differential diagnostic skills. Students will be required to use theoretical models and findings from treatment research to develop evidence-based treatments for specific clinical cases.

2. Class meets every Wednesday 1:00 to 3:50 p.m. in 137 Lockett Hall.

3. Office hours will be Wednesday evenings 4:30 – 6:30 or by appointment.

4. Students will:
   a. attend class regularly and participate in class discussions and activities
   b. complete all assigned readings before class and be prepared to participate in discussions
   c. be responsible for material in lecture notes, reading assignments, and class discussions.

MOODLE

We will use MOODLE as our course management system. I will put everything on MOODLE including lecture notes, and other course documents such as web links, posted articles, course project information, and general course announcements. PowerPoint lectures will be posted for each class by date. PowerPoint slides will be available the day before class. It is your responsibility to manage your own slides (print out, download, etc). If you have trouble with MOODLE please contact IT and “the MOODLE people.”

REQUIRED TEXTBOOKS

# RECOMMENDED RESOURCES

(available in my office for checkout)


## COURSE OBJECTIVES

<table>
<thead>
<tr>
<th>Knowledge Objective</th>
<th>By the end of the course, you will be able to:</th>
<th>Learner Outcome Measure</th>
</tr>
</thead>
</table>
| **Anatomical & Physiological Bases**  
KASA Standard  
III C – Knowledge of Nature of Communication Disorders | o Demonstrate basic knowledge of the anatomical and neurophysiological principles of neuroplasticity.  
o Demonstrate knowledge of the anatomical and physiological bases of cognitive and communicative processes (not related to language structures (e.g. pragmatics of language use).  
o Describe the effects on the physiological components of neurologic injury or disease that results in acquired neurogenic cognitive-communicative disorders.  
o Describe acquired cognitive-communicative disorders due to TBI and RHD, including: Etiology  
Neurological symptoms  
Speech/cognitive-communicative/cognitive symptoms | Mid-Term Exam |
| **Psychological (KASA Standard**  
**III C – Knowledge of Nature of Communication Disorders)** | o Demonstrate knowledge of theoretical models for social language use, attention, memory and other cognitive processes (as possible) that result in cognitive-communicative disorders.  
o Describe the psychological effects of neurologic injury or disease that result in acquired neurogenic cognitive-communicative disorders. | Final Exam |
| **Linguistic (KASA Standard**  
**III C – Knowledge of Nature of Communication Disorders)** | o Demonstrate knowledge about the differences in linguistic processes used in acquired language disorders and those used in cognitive communicative disorders. | Mid-Term Exam |
| **Genetic (KASA Standard**  
**III C – Knowledge of Nature of Communication Disorders)** | o Describe the current findings about which neurologic diseases have a genetic base. | Final Exam |
| **Cultural (KASA Standard**  
**III C – Knowledge of** | o Describe the significance of acquired neurogenic cognitive- |

Mid-Term Exam

Final Exam

Mid-Term Exam

Final Exam
<table>
<thead>
<tr>
<th>Knowledge Objective</th>
<th>By the end of the course, you will be able to:</th>
<th>Learner Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of Communication Disorders (KASA Standard III C - Knowledge of Nature of Communication Disorders)</td>
<td>communicative disorders and neurologic injury and disease in western culture, and compare/contrast with other cultures.</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>
| Developmental/ Lifespan (KASA Standard III C - Knowledge of Nature of Communication Disorders) | o Describe how cognitive-communicative behaviors change over the lifespan in individuals with developmental and acquired neurogenic cognitive-communicative disorders.  
  o Describe how developmental and acquired neurogenic cognitive-communicative disorders affect an individual's ability to participate in daily activities throughout the lifespan | Final Exam              |
| Prevention (KASA Standard III D - Knowledge of Principles and Methods)               | o Describe prevention aspects of acquired neurogenic cognitive-communicative disorders, neurologic injury and disease that may be amenable to prevention. | Midterm                 |
| Assessment (KASA Standard III D - Knowledge of Principles and Methods)               | o Demonstrate knowledge of selected cognitive and communicative assessments including:                                        | Assessment Assignment, Final Exam |
|                                                                                     | Administration procedures  
  Scoring and interpreting results  
  Intended populations  
  Validity, reliability,  
  Cultural appropriateness                                                            |                         |
| Treatment (KASA Standard III D - Knowledge of Principles and Methods)               | o Demonstrate competence in using evidence-based practice standards to locate, interpret, and select appropriate treatments for the cognitive-communicative disorders associated with RHD and TBI.  
  o Demonstrate competence in developing appropriate, theoretically sound treatment programs based on diagnostic information (i.e. case study).  
  o Describe the implications of principles of neuroplasticity as they relate to treatment of acquired neurogenic cognitive-communicative disorders. | Evidence-based Treatment Assignment, Final Exam |

**GRADING INFORMATION**

<table>
<thead>
<tr>
<th>Exams</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>100</td>
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<tr>
<td>Cumulative Final</td>
<td>250</td>
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<tr>
<td>Projects</td>
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</tr>
<tr>
<td>1. Neurologic Disorder Paper</td>
<td>75</td>
</tr>
<tr>
<td>2. Neurologic Disorder Presentation</td>
<td>50</td>
</tr>
<tr>
<td>3. Case Study Presentation</td>
<td>75</td>
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<tr>
<td>4. Treatment Review</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>600</td>
</tr>
</tbody>
</table>
Final Course Grade is based on cumulative points:

- **A** = 540 – 600
- **B** = 480 – 539
- **C** = 420 – 479
- **D** = 360 – 419
- **F** = ≤ 359

**PROJECTS**

1. **Neurologic Disorder Paper – Individual Assignment (75 Points)**
   a. Each person will be assigned a neurologic disorder to research and present to the class.
   b. Information to be covered will include:
      i. Definition of Disorder
      ii. Clinical presentation (symptoms) of the disorder
      iii. History of disorder
      iv. Neurologic involvement
      v. Cause (must include genetic and heritability information)
      vi. Cultural, racial, and/or ethnic considerations
      vii. Effect on communication (speech, language, hearing)
      viii. Available treatments
      ix. Prevention of the disorder
   c. Resources can **only** be textbooks (not those used in class) and journal articles. No online references are allowed.
   d. References must be cited in APA 6th. Use the following website to be sure you cite correctly: [http://owl.english.purdue.edu/owl/section/2/10/](http://owl.english.purdue.edu/owl/section/2/10/)
   e. A grading rubric is posted on Moodle and will be discussed in class prior to the time the assignment is due.

2. **Neurologic Disorder Presentation – Individual Assignment (50 Points)**
   a. Information to be covered will include what was covered in your paper:
      i. Definition of Disorder
      ii. Clinical presentation (symptoms) of the disorder
      iii. History of disorder
      iv. Neurologic involvement
      v. Cause (must include genetic and heritability information)
      vi. Cultural, racial, and/or ethnic considerations
      vii. Effect on communication (speech, language, hearing)
      viii. Available treatments
      ix. Prevention of the disorder
   b. Presentations will be 7 minutes maximum.

3. **Case Study Presentation (aka Grand Rounds) – Team Assignment (75 Points)**
   a. Each team will present a case study on a patient with an acquired neurogenic communication disorder, assigned by Dr. Donovan. In a hospital setting this type of presentation is called “Grand Rounds”
   b. The case study will be presented to the class.
Presentation will be 10 minutes maximum, followed by class discussion led by presenters. You will need to prepare a written summary of your presentation that will be distributed to class member and me. The end product will be a set of 13 case studies of your future use. The handout should be 1-2 pages, 1" margins all around, single spaced, 11 or 12 point font.

References need to be cited using APA 6th citation method. This website will provide you with everything you need – please use it. http://owl.english.purdue.edu/owl/section/2/10/

A grading rubric and a sample case study will be posted on Moodle and will be discussed in class prior to the time the assignment is due.

4. Treatment Review Paper – Individual Assignment (50 Points)
The purpose of this review is to allow you to critically evaluate a treatment study for a cognitive-communicative disorder related to TBI or RHD. The study must come from a peer-reviewed journal between 2005 and 2014. None of the articles used in COMD 7387 may be selected. Do not use case studies, published abstracts, reviews, or book chapters.

a. Please use standard academic literature search engines which can be found on the LSU Library webpage. You can access any article through inter-library loan if you cannot gain access online.
   i. Database searches such as MedLine, PubMed, Ebsco, Web of Science, Psych Info
b. Resources suggested in COMD 7387 may also be used.
c. Full instructions and the grading rubric will be discussed in class and posted on MOODLE.

EMERGENCIES AND EXTENUATING CIRCUMSTANCES (PS – 22)
(http://moodle2.grok.lsu.edu/article.aspx?articleid=11429)

a. Please notify me as soon as possible but in every case prior to class either by phone 578-3938 or e-mail ndonovan@lsu.edu.
b. In the case of unexcused absence on a day where an activity or quiz is administered, you will receive 0 points. Make-up exams must be arranged in advance and accompanied by the necessary documentation.

STUDENTS WITH SPECIAL NEEDS (LSU Office of Disability Services http://appI003.lsu.edu/slas)
If you have a disability that may require classroom or test accommodations, please see me as soon as possible. If you have not already done so, please register with the Office of Disability Services, 112 Johnston Hall, 225/578-5919, which is the department responsible for coordinating accommodations and services for students with disabilities.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 (FERPA)
http://sites01.lsu.edu/wp/registraroffice/privacy-guidelines/ferpa-for-students/
PS 30 Student Privacy Rights
http://appl003.ocs.lsu.edu/ups.nsf/4a8b193f0753c7e486257
14000672ba4/e73c7452dc489fb586256c250062ae68?OpenDocument

I cannot share any information about you or your academic performance in my courses without your permission. Please see the information provided in the two url’s associated with this paragraph to read more about your rights under FERPA if you are not familiar with them. FERPA has implications for us course in three ways: 1) I am permitted to use Moodle to share information directly with you about your grades and assignments, and 2) you have the right to inspect any materials I do not hand back, and 3) I am permitted to write about your performance in letters of recommendation you ask me to write.
ACADEMIC INTEGRITY (LSU Code of Student Conduct 8.1)  
(http://saa.lsu.edu/AI.htm)

1. You are expected to do original work—performing independently on exams and non-group assignments. Please see the LSU Code of Student Conduct on the LSU website.
2. If you are unclear about any aspect of the code of conduct or standards of academic integrity, please ask me.
3. It is your responsibility to be aware of the consequences for misconduct. It could result in delay of graduation; delay in admission to graduate school, or for repeat offenders, expulsion from the university.
4. Definitions of improper academic conduct:
   - **Cheating.** The improper taking or tendering of any information or material, which shall be used to determine academic credit. Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual on a take-home test or homework when not specifically permitted by the teacher; looking or attempting to look at another student's paper during an examination; looking or attempting to look at text or notes during an examination when not permitted. Tendering of information includes, but is not limited to, giving your work to another student to be used or copied; giving someone answers to exam questions either when the exam is being given or after taking an exam; giving or selling a term paper or other written materials to another student; sharing information on a graded assignment.
   - **Plagiarism.** The attempt to represent the work of another as the product of one's own thought, whether the other's work is published or unpublished, or simply the work of a fellow student. Plagiarism includes, but is not limited to, quoting oral or written materials without citation on an exam, term paper, homework, or other written materials or oral presentations for an academic requirement; submitting a paper which was purchased from a term paper service as your own work; submitting anyone else's paper as your own work.
   - **Misrepresentation.** Any act or omission with intent to deceive a teacher for academic advantage. Misrepresentation includes using computer programs generated by another and handing it in as your own work unless expressly allowed by the teacher; lying to a teacher to increase your grade; lying or misrepresenting facts when confronted with an allegation of academic honesty.
   - **Conspiracy.** The planning or acting with one or more persons to commit any form of academic dishonesty.
   - **Fabrication.** The use of invented or fabricated information, or the falsification of research or other findings with the intent to deceive for academic or professional advantage.

STUDENT RIGHTS (LSU Code of Student Conduct http://saa.lsu.edu/code-student-conduct)

1. Ideally, if you feel that I have infringed upon your student rights, please make an appointment with me so that we can try and resolve the issue.
2. If you do not feel I have addressed your problem appropriately you should make an appointment to discuss the situation with our department chairman, Dr. Hoffman.
3. If you feel that the issue is not resolved at the department level, you have the right to seek further recourse at the college level. Please refer to the student handbook for the procedures to follow.
THINGS TO KNOW

1. Please turn off all cell phones and stow them in your backpack before class starts. The literature shows that these electronic distractions reduce your ability to attend and learn.

2. Using your computer during lecture periods for note-taking purposes is acceptable. IM'ing, surfing the net, checking emails (etc., etc.) will not help you get an A in the class.

3. Please use my office hours if you need any help to clarify information presented in class. If you have clinic or classroom conflicts with my office time I will be happy to find a time that will work for both of us.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics To Be Covered</th>
<th>Required Reading</th>
<th>Assignments/Feedback/Action Due Dates</th>
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<tbody>
<tr>
<td>1</td>
<td>1/14</td>
<td>Course Introduction / Review 7387</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>1/21</td>
<td>Neuroanatomy Review from Fall</td>
<td>LaPointe Atlas</td>
<td>1/30/15 Reflection Papers in Moodle</td>
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<tr>
<td>3</td>
<td>1/28</td>
<td>Cognitive-Communicative Disorders From a Social/Cultural Perspective</td>
<td>Multimedia Assignment</td>
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<td>2/4</td>
<td>Cognition – Attention</td>
<td>Kimbarow Chapter 1</td>
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<td>2/11</td>
<td>Cognition – Human Memory Demo - Donovan</td>
<td>Kimbarow Chapter 2</td>
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<td>2/18</td>
<td>Cognition – Executive Functions Case Presentation #1</td>
<td>Kimbarow Chapter 3</td>
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<td>2/24</td>
<td>Traumatic Brain Injury Part 1 Case Presentation #3</td>
<td>Papathanasiou Chapter 17</td>
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<td>8</td>
<td>3/4</td>
<td>MIDTERM EXAMINATION – TAKE HOME</td>
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<td>3/11/15 Submit treatment article for approval</td>
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<td>3/11</td>
<td>Traumatic Brain Injury Part 2 Case Presentation #5</td>
<td>*Ylivisaker Chapter 33</td>
<td>4/3/15 4 P.M. – Submit treatment review papers to Moodle</td>
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<td>Traumatic Brain Injury Part 3 Case Presentation #7</td>
<td>Kimbarow Chapter 6</td>
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<td>3/25</td>
<td>Right Hemisphere Disorders Case Presentation #9</td>
<td>Kimbarow Chapter 4</td>
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<td>4/1</td>
<td>Right Hemisphere Disorders Case Presentation #11</td>
<td>Papathanasiou Chapters 16 &amp; 17</td>
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<td>13</td>
<td>4/8</td>
<td>Spring Break Holiday – Class Cancelled</td>
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<td>4/15</td>
<td>Right Hemisphere Disorders Case Presentation #13</td>
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<tr>
<td>15</td>
<td>4/22</td>
<td>Neuro Disorder Presentations</td>
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<td>4/22/15 4 P.M. – Submit Neuro Disorder Papers to Moodle</td>
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<tr>
<td>16</td>
<td>4/29</td>
<td>LSLP Role In Counseling adults with Cog-Comm Disorders</td>
<td>*Manasco Chapter 10</td>
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<tr>
<td>17</td>
<td>5/06</td>
<td>FINAL EXAMINATION – TAKE HOME</td>
<td></td>
<td>5/6/15 4 P.M. Submit final exam Moodle.</td>
</tr>
</tbody>
</table>

*Required Readings not in textbooks will be posted on moodle.
Dear Ms Castrillo:

Attached please find completed Form C requests to change COMD 7783 and COMD 7385 by eliminating the prerequisite for COMD 7280.

The sequencing of the newly added classes, COMD 7281 and COMD 7282 need not be specified by prerequisites. Practically speaking, the classes will only be taught once a year and our students move through the program in a cohort of 25-30 so the ordering of these classes will be specified by the department.

Please let me know if there is anything else you need.

Paul R Hoffman, Chair
Department of Communication Sciences & Disorders
Louisiana State University

Dr. Hoffman,

Please see attached for the actions taken by the Courses and Curricula Committee regarding the COMD proposals.

Sincerely,

Anna Castrillo, M.A.
Coordinator
Office of the University Registrar
Louisiana State University
112 Thomas Boyd Hall
Phone: (225)578-4111
Fax: (225)578-5991