

## 1. General Information

1a. Submitted by the College of: ARTS & SCIENCES

Date Submitted: 3/17/2015

1b. Department/Division: Linguistics

1c. Contact Person

Name: Edward R. Barrett

Email: erbarr2@uky.edu

Phone: 859-257-3114

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

## 2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: LIN 611

2c. Full Title: Quantitative Methods in Linguistics

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 3

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

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2j. Course Description for Bulletin: An increasingly important method in linguistic research relies on measuring some quantity, and inferring some linguistic reality based on such findings. This course presents scenarios where such an approach makes sense, and outlines the appropriate measures and the safest, most reliable ways in which such measures can be used to draw inferences. This course requires concurrent enrollment in LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods.

2k. Prerequisites, if any: LIN 601 (Research Methods in Linguistics) or similar course approved by the Director of Graduate Studies. LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods must be taken concurrently.

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Spring,

Will the course be offered every year?: No

If No, explain: This will be one of several 600-level courses offered on a regular cycle for graduate students in the degree program.

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 15

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: Yes

Will it be of interest to a significant number of students outside the degree pgm?: No

If Yes, explain:

8. Check the category most applicable to this course: Relatively New – Now Being Widely Established,

If No, explain:

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: Yes

If YES, name the proposed new program: Ph.D. in Linguistics

b. Will this course be a new requirement for ANY program?: No

If YES, list affected programs:

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: No

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

## Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|ARHIPP2|Andrew R Hippisley|LIN 611 NEW Dept Review|20150317

SIGNATURE|ACSI222|Anna C Harmon|LIN 611 NEW College Review|20150921

SIGNATURE|ZNNIKO0|Roshan Nikou|LIN 611 NEW Graduate Council Review|20151210

### New Course Form

https://myuk.uky.edu/sap/bc/soap/rfc?services=

Generate R

[Open in full window to print or save](#)

**Attachments:**

Upload File

	ID	Attachment
Delete	4463	LIN 611_proposal v3.docx

First | 1 | Last

(\*denotes required fields)

**1. General Information**

- a. \* Submitted by the College of:  Submission Date: 3/17/2015
- b. \* Department/Division:
- c.
  - \* Contact Person Name:  Email:  Phone:
  - \* Responsible Faculty ID (if different from Contact):  Email:  Phone:
- d. \* Requested Effective Date:  Semester following approval OR  Specific Term/Year<sup>1</sup>
- e.
  - Should this course be a UK Core Course?  Yes  No
  - If YES, check the areas that apply:
    - Inquiry - Arts & Creativity  Composition & Communications - II
    - Inquiry - Humanities  Quantitative Foundations
    - Inquiry - Nat/Math/Phys Sci  Statistical Inferential Reasoning
    - Inquiry - Social Sciences  U.S. Citizenship, Community, Diversity
    - Composition & Communications - I  Global Dynamics

**2. Designation and Description of Proposed Course.**

- a. \* Will this course also be offered through Distance Learning?  Yes<sup>4</sup>  No
- b. \* Prefix and Number:
- c. \* Full Title:
- d. Transcript Title (if full title is more than 40 characters):
- e. To be Cross-Listed<sup>2</sup> with (Prefix and Number):
- f. \* Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours<sup>3</sup> for each meeting pattern type.
 

<input type="text" value="3"/> Lecture	<input type="text"/> Laboratory <sup>1</sup>	<input type="text"/> Recitation	<input type="text"/> Discussion
<input type="text"/> Indep. Study	<input type="text"/> Clinical	<input type="text"/> Colloquium	<input type="text"/> Practicum
<input type="text"/> Research	<input type="text"/> Residency	<input type="text"/> Seminar	<input type="text"/> Studio
<input type="text"/> Other	If Other, Please explain: <input type="text"/>		
- g. \* Identify a grading system:
  - Letter (A, B, C, etc.)
  - Pass/Fail
  - Medicine Numeric Grade (Non-medical students will receive a letter grade)
  - Graduate School Grade Scale
- h. \* Number of credits:
- i. \* Is this course repeatable for additional credit?  Yes  No
  - If YES: Maximum number of credit hours:
  - If YES: Will this course allow multiple registrations during the same semester?  Yes  No

## j. \* Course Description for Bulletin:

An increasingly important method in linguistic research relies on measuring some quantity, and inferring some linguistic reality based on such findings. This course presents scenarios where such an approach makes sense, and outlines the appropriate measures and the safest, most reliable ways in which such measures can be used to draw inferences. This course requires concurrent enrollment in LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods.

## k. Prerequisites, if any:

LIN 601 (Research Methods in Linguistics) or similar course approved by the Director of Graduate Studies. LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods must be taken concurrently.

l. Supplementary teaching component, if any:  Community-Based Experience  Service Learning  Both3. \* Will this course be taught off campus?  Yes  No

If YES, enter the off campus address:

## 4. Frequency of Course Offering.

a. \* Course will be offered (check all that apply):  Fall  Spring  Summer  Winter

b. \* Will the course be offered every year?  Yes  No

If No, explain: This will be one of several 600-level courses offered on a regular cycle for graduate s

5. \* Are facilities and personnel necessary for the proposed new course available?  Yes  No

If No, explain:

## 6. \* What enrollment (per section per semester) may reasonably be expected? 15

## 7. Anticipated Student Demand.

a. \* Will this course serve students primarily within the degree program?  Yes  No

b. \* Will it be of interest to a significant number of students outside the degree pgm?  Yes  No

If YES, explain:

## 8. \* Check the category most applicable to this course:

- Traditional – Offered in Corresponding Departments at Universities Elsewhere  
 Relatively New – Now Being Widely Established  
 Not Yet Found in Many (or Any) Other Universities

## 9. Course Relationship to Program(s).

a. \* Is this course part of a proposed new program?  Yes  No

If YES, name the proposed new program:

Ph.D. in Linguistics

b. \* Will this course be a new requirement<sup>§</sup> for ANY program?  Yes  No

If YES<sup>§</sup>, list affected programs:

## 10. Information to be Placed on Syllabus.

a. \* Is the course 400G or 500?  Yes  No

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in 10.b. You must include: (i) ident additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR

b.  \* The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if appli 10.a above) are attached.

<sup>§</sup> Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.  
<sup>¶</sup> The chair of the cross-listing department must sign off on the Signature Routing Log

- ▣ In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, is two hours per week for a semester for one credit hour. (from SR 5.2.1)
- ▣ You must also submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.
- ▣ In order to change a program, a program change form must also be submitted.

Rev 8/09

**LIN 611**  
**Quantitative Methods in Linguistics**

**Instructor:** Andrew Hippisley                      **Email:** *andrew.hippisley@uky.edu*  
**Office phone:** 859-257 6989                      **Office address:** 1377 POT  
**Preferred method on contact:** *email*              **Office Hours:** MW 11-12  
**Day/Time/Place:** *Tuesday, Thursdays 11-12:15*

**Prerequisite:** LIN 601 Research Methods in Linguistics, consent of instructor.

**Corequisite:** must be taken con-currently with LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods.

**Course description:** An increasingly important method in linguistic research relies on measuring some quantity, and inferring some linguistic reality based on such findings. This course presents scenarios where such an approach makes sense, and outlines the appropriate measures and the safest, most reliable ways in which such measures can be used to draw inferences. Must be taken concurrently with LIN 640 Advanced Laboratory in Linguistics: Quantitative Methods.

**Course Goals/Objective:** The course aims to equip students with a sophisticated knowledge of quantitative techniques for conducting linguistic research, applied to various scenarios.

**Student Learning Outcomes:** Upon completion of the course students should be able to

- determine the kind of research problem that would benefit from quantitative analysis
- determine the most appropriate quantitative approach to the problem
- decide upon the best technique for determining statistical significance in a given research setting
- make appropriate use of statistical software packages (such as R) in linguistic research

**Required materials:**

*Main text:*

- Williams, Frederick and Peter Monge. 2001. *Reasoning with statistics*. Fort Worth, TX: Harcourt. [5<sup>th</sup> edition]

*Running example, a quantitative study of number in Russian*

- Brown, Dunstan et al. 2013. Grammatical typology and frequency analysis: number availability and number use. *Journal of Language Modeling* 1 (2).1-15

*Supplementary readings distributed prior to class, include:*

- Baayen, R. H. 2008. *Analyzing Linguistic Data: a Practical Introduction to Statistics using R*. Cambridge: CUP. (select chapters)
- Gomez, Pascual Cantos. 2013. *Statistical Methods in Language and Linguistic Research*. Sheffield: Equinox.

<http://www.equinoxpub.com/home/statistical-methods-language-linguistic-research-pascual-cantos-gomez/>

- Gries, Stefan Th. 2009. *Statistics for Linguistics with R*. Berlin/new York: Mouton. (select chapters)
- Johnson, Keith. 2008. *Quantitative Methods in Linguistics*. Oxford: Blackwell.  
<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1405144246.html>

There will be no examinations.

**Course assignment:** A student's course grade will be based on the following components:

60% for six homeworks

40% for a project that includes a demonstration/presentation

**Summary description of course assignments:** (1) six problem-based homeworks, (2) a final project that includes a demonstration/presentation.

**Course grading:**

90-100%	A	70-79%	C
80-89%	B	60-69%	E

## COURSE POLICIES

**Submission of Assignments:** Students will submit their term projects both on paper and online. Term projects are due on the last day of class. If a student cannot attend class on the day on which s/he is scheduled to give a class presentation or on the day on which the term project is due, s/he should consult with me as promptly as possible (ideally, before the day of her/his absence) to make alternative plans.

**Attendance Policy:** In order to benefit fully from my lectures and from the insights of the other students in the course (and to contribute your own insights), it is important that you attend every class session; if you do have to miss a class session, you must let me know the circumstances of your absence. If a student has three unexcused absences, her/his course grade will be reduced one letter grade.

**Excused Absences:** Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).



Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

**Verification of Absences:** Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

**Academic Integrity:** Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online at

<http://www.uky.edu/StudentAffairs/Code/part2.html>)

states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

*Please note:* Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

**Accommodations due to disability:** If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: [jkarnes@email.uky.edu](mailto:jkarnes@email.uky.edu)) for coordination of campus disability services available to students with disabilities.

## Tentative course schedule:

WEEK	TOPIC	READING ASSIGNMENTS*	WRITTEN HOMEWORK DUE-DATES
Week 1 (Jan 14)	Introducing quantitative research in linguistics	Williams, ch 1; Brown et al	
Week 2 (Jan 19, 21):	Introduction contd: some case studies	Williams, ch 2; selected	
Week 3 (Jan 26, 28):	Measurement: levels, scales, validity	Williams, ch 3	
Week 4 (Feb 2, 4)	Measurement contd.	Williams, ch 3; Brown et al	HW 1 due February 4
Week 5 (Feb 9, 11):	Indexes: tabular, graphical, central tendency, dispersion, distributional	Williams, ch 4	
Week 6 (Feb 16, 18):	Population statistics and parameters: random sampling, distributions, sampling error	Williams, ch 5; Brown et al	HW 2 due February 18
Week 7 (Feb 23, 25):	Hypothesis testing: how to state a hypothesis, errors, rejecting the null hypothesis	Williams, ch 6; Brown et al	
Week 8 (March 2, 4):	The <i>t</i> test: what it is, when to use it	Williams, ch 7	HW 3 due March 4
Week 9 (March 9, 11):	The <i>F</i> test: what it is, when to use it; distinguishing single and multi-factor analysis	Williams, chs 8 and 9	
Week 10 (March 16, 18):	SPRING BREAK		
Week 11 (March 23, 25):	Nonparametric testing, the $\chi^2$ test: what it is and when to use it	Williams, ch 10	HW 4 due March 25
Week 12 (Mar 30, Apr 1)	Correlation: product moment, multiple, partial, nonparametric	Williams, ch 11; Brown et al	
Week 13 (April 6, 8):	Regression	Williams, ch 12	HW 5 due April 8
Week 14 (April 13, 15):	Multiple regression	Williams, ch 13	
Week 15 (April 20, 22):	Cluster analysis	Williams, ch 14	HW 6 due April 22
Week 16 (April 27, 29):	Group presentations		