

RECEIVED

MAY 2 2014

OFFICE OF THE
CHIEF OF STAFF**Course Information**

Date Submitted: 4/17/2014

Current Prefix and Number: EDP - Edc. & Counseling Psychology , EDP 558 GATHERING, ANALYZG & USING EDUCATIONAL DATA

Other Course:

Proposed Prefix and Number: EDP/EPE 558

What type of change is being proposed?

Major – Add Distance Learning

Should this course be a UK Core Course? No

1. General Information

a. Submitted by the College of: EDUCATION

b. Department/Division: Educational, School and Counseling Psych

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead:

e. Contact Person

Name: Michael Toland

Email: toland.md@uky.edu

Phone: 859-257-3395

Responsible Faculty ID (if different from Contact)

Name: Michael Toland

Email: toland.md@uky.edu

Phone: 859-257-3395

f. Requested Effective Date

Semester Following Approval: No OR Effective Semester: Summer 2014

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: Please Add

b. Full Title: GATHERING, ANALYZING, & USING EDUCATIONAL DATA II

Proposed Title: GATHERING, ANALYZING, & USING EDUCATIONAL DATA II

c. Current Transcript Title: GATHERING, ANALYZG & USING EDUC DATA II

Proposed Transcript Title: GATHERING, ANALYZG & USING EDUC DATA II

d. Current Cross-listing: Same as EPE 558

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LABORATORY: 3

Proposed Meeting Patterns

LECTURE: 3

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: *Graduate School Grade Scale*

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours: NA

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: The course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare for more advanced quantitative courses. Students will gain valuable statistical computing skills via stats software.

Proposed Course Description for Bulletin: The course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare for more advanced quantitative courses. Students will gain valuable statistical computing skills via stats software.

2j. Current Prerequisites, if any: Prereq: EDP/EPE 557 or equivalent

Proposed Prerequisites, if any: Prereq: EDP/EPE 557 or equivalent

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component: No Change

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address: na

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rationale: NA

5a. Are there other depts. and/or pgms that could be affected by the proposed change? Yes

If YES, identify the depts. and/or pgms: This course is taken by students from all departments in the College of Education. Students from other colleges on campus often take it as an elective, but to our knowledge is not required.

5b. Will modifying this course result in a new requirement of ANY program? No

If YES, list the program(s) here: NA

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name: Michael Toland

Instructor Email: toland.md@uky.edu

Internet/Web-based: Yes

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? EDP/EPE 557 - GATHERING, ANALYZING, AND USING EDUCATIONAL DATA II (see attached syllabus) conforms to all University of Kentucky Distance Learning Syllabus Guidelines and specifically includes information about virtual office hours, procedures for resolving technical issues, notification and information about self-disclosure and procedures for disability accommodations etc. Web-based course delivery methods will be used for 100% of individual student engagement and course interactions. Web based assessments described in the syllabus include: (1) Asynchronous Dialogue: Students are required to actively interact with their class peers on the Blackboard based discussion board forum; (2) Participation: Students are required to complete independent work as presented on the course calendar and submit blackboard practice activities online; (3) Quizzes and Exam: Students will complete quizzes and an exam administer and completed via Blackboard. Web discussions are intended to facilitate critical thinking about statistics and build their capacity to improve her/his own learning. Discussion questions and asynchronous dialogue with other students in class on the web will enhance critical thinking.

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. The course is designed to be delivered online, through asynchronous learning technology systems. The Distance Learning experience for students enrolled in this course is based on a cohort model and will be comparable to classroom-based instruction. The web-based format aligns with effective adult learning formats and include timely access to the course instructor and peers as well as feedback on discussion board forums and blackboard practice activities. The syllabus clearly explicates students' reading assignments including required textbook(s). All assessments are aligned with stated course objectives (goals). Instructor-student interaction is comparable to classroom instructional methods. Student performance is assessed by the instructor through participation in and monitoring of asynchronous, on-line interactions, observations of on-line discussions, feedback on Discussion board forums, and evaluation of homework, quizzes, and exam (see syllabus).

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. This online course will use University of Kentucky technology that protects the integrity of student work. The course will not require the use of examination proctors or other support staff or interactive video. The syllabus describes UK academic policies that apply in this course and are articulated in the "Students Rights and Responsibilities Handbook" and "the UK Graduate Bulletin." Important policies and regulations applicable to this course are explicitly stated in the syllabus including attendance, cheating and plagiarism, course withdrawal, incomplete grades, and acceptable standards of English, absences, changes in the syllabus, standards for assessing the quality of student work and late work. A statement of student responsibilities is included (see syllabus).

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? No

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

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? All students in this online course have equal access to all student services at the University of Kentucky for which they qualify and those student services are similar to those available to individuals taking this class in a tradition (i.e. face-to-face) classroom setting. Access to student services are explicated on the University of Kentucky websites including but not limited to: ([http://www.uky.edu.TASC/index.php](http://www.uky.edu/TASC/index.php)) and (<http://www.uky.edu/UKIT/>). Students who have special needs or require accommodations of any kind will be advised to register with the UK Disability Resource Center for assistance. The course instructor will work with students on an individual basis to make appropriate accommodations to participate in the class and complete work (see syllabus).

6. How do course requirements ensure that students make appropriate use of learning resources? In addition to purchasing required textbooks, selected readings will be available through the University of Kentucky Libraries online reserve system or posted on the course website. Additionally, the program will provide support to students encountering technology problems in accessing the course content.

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program. Access is provided via students' personal computer proxy access to online library resources (see syllabus).

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/>)? Students are informed of the availability of University of Kentucky services in the syllabus (CELT, Blackboard, Canvas) help desk UK IT Customer Service Center as described in the syllabus. Blackboard / Canvas instructors have received required training in the use of the Course management System, UK Libraries online resources (and EZ Proxy tools) and will assist students as needed. In sum, all students in this course have equal access to all student services at the University of Kentucky for which they qualify. Access to student services are explicated on the University of Kentucky websites including but not limited to: (<http://www.uky.edu.TASC/index.php>) and (<http://www.uky.edu/UKIT/>) (see syllabus).

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? YES

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. Students will have access to the course content via Blackboard, supported by UKIT and CELT (the TASC successors)

10. Does the syllabus contain all the required components? YES

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

Instructor Name: Michael Toland

SIGNATURE|KKMCGH0|Keisha Love|EDP 558 CHANGE Dept Review|20131009

SIGNATURE|BETHG|Beth L Goldstein|EDP 558 CHANGE Cross-List Chair Review|20131023

SIGNATURE|MYRT|Martha L Geoghegan|EDP 558 CHANGE College Review|20140203

SIGNATURE|JMETT2|Joanie Ett-Mims|EDP 558 CHANGE Undergrad Council Review|20140423

SIGNATURE|ZNNIKO0|Roshan N Nikou|EDP 558 CHANGE Graduate Council Review|20140502

Courses	Request Tracking
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Course Change Form

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

Open in full window to print or save

Generate R

Attachments:

Browse...

Upload File

	ID	Attachment
Delete	2353	558_Syllabus (traditional).doc
Delete	3396	558 (DL) Syllabus.doc

First 1 Last

Select saved project to retrieve...

Get New

NOTE: Start form entry by choosing the Current Prefix and Number (*denotes required fields)

Current Prefix and Number:		EDP - Edc. & Counseling Psychology EDP 558 GATHERING, ANALYZG & USING EDUC DATA	Proposed Prefix & Number: (example: PHY 401G)	EDP/EPE 558
* What type of change is being proposed?		<input type="checkbox"/> Major Change <input checked="" type="checkbox"/> Major - Add Distance Learning <input type="checkbox"/> Minor - change in number within the same hundred series, exception to the same "hundred series" <input type="checkbox"/> Minor - editorial change in course title or description which does not fit in content or emphasis <input type="checkbox"/> Minor - a change in prerequisite(s) which does not imply a change in content or emphasis, or which is made necessary by the elimination or alteration of the prerequisite(s) <input type="checkbox"/> Minor - a cross listing of a course as described above		
Should this course be a UK Core Course? <input type="radio"/> Yes <input checked="" type="radio"/> No				
If YES, check the areas that apply:				
<input type="checkbox"/> Inquiry - Arts & Creativity <input type="checkbox"/> Composition & Communications - II <input type="checkbox"/> Inquiry - Humanities <input type="checkbox"/> Quantitative Foundations <input type="checkbox"/> Inquiry - Nat/Math/Phys Sci <input type="checkbox"/> Statistical Inferential Reasoning <input type="checkbox"/> Inquiry - Social Sciences <input type="checkbox"/> U.S. Citizenship, Community, Diversity <input type="checkbox"/> Composition & Communications - I <input type="checkbox"/> Global Dynamics				
1. General Information				
a. Submitted by the College of:		EDUCATION	Submission Date: 4/17/2014	
b. Department/Division:		Educational, School and Counseling Psych		
c.* Is there a change in "ownership" of the course? <input type="radio"/> Yes <input checked="" type="radio"/> No If YES, what college/department will offer the course instead?				
e.* * Contact Person Name: Michael Toland Email: toland.md@uky.edu Phone: 859-257-3395 * Responsible Faculty ID (if different from Contact) Michael Toland Email: toland.md@uky.edu Phone: 859-257-3395				
f.* Requested Effective Date:		<input type="checkbox"/> Semester Following Approval	OR	Specific Term: ² Summer 2014
2. Designation and Description of Proposed Course.				
a. Current Distance Learning(DL) Status:		<input type="radio"/> N/A <input type="radio"/> Already approved for DL* <input checked="" type="radio"/> Please Add <input type="radio"/> Please Drop		
*If already approved for DL, the Distance Learning Form must also be submitted <u>unless</u> the department affirms (by checking this box) that proposed changes do not affect DL delivery.				
b. Full Title:		GATHERING, ANALYZING, & USING EDUCATIONAL DATA II	Proposed Title: *	GATHERING, ANALYZING, & US: EDUCATIONAL DATA II
c. Current Transcript Title (if full title is more than 40 characters):		GATHERING, ANALYZG & USING EDUC DATA II		

c. Proposed Transcript Title (if full title is more than 40 characters):		GATHERING, ANALYZG & USING EDUC DATA II			
d. Current Cross-listing: <input type="checkbox"/> N/A		OR	Currently ² Cross-listed with (Prefix & Number):	Same as EP	
Proposed – ADD ² Cross-listing (Prefix & Number):					
Proposed – REMOVE ^{3d} Cross-listing (Prefix & Number):					
e. Courses must be described by <u>at least one</u> of the meeting patterns below. Include number of actual contact hours ⁵ for each meeting pattern type.					
Current:	Lecture	Laboratory ²	Recitation	Discussion	Indep. Study
		3			
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other Please explain:		
Proposed: *	Lecture	Laboratory ²	Recitation	Discussion	Indep. Study
	3				
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other Please explain:		
f. Current Grading System:		ABC Letter Grade Scale			
Proposed Grading System:*		<input type="radio"/> Letter (A, B, C, etc.) <input type="radio"/> Pass/Fail <input type="radio"/> Medicine Numeric Grade (Non-medical students will receive a letter grade) <input checked="" type="radio"/> Graduate School Grade Scale			
g. Current number of credit hours:		3	Proposed number of credit hours:*	3	
h.* Currently, is this course repeatable for additional credit?					<input type="radio"/> Yes <input checked="" type="radio"/> No
* Proposed to be repeatable for additional credit?					<input type="radio"/> Yes <input checked="" type="radio"/> No
If YES:	Maximum number of credit hours:			NA	
If YES:	Will this course allow multiple registrations during the same semester?				<input type="radio"/> Yes <input checked="" type="radio"/> No
i. Current Course Description for Bulletin:					
The course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare for more advanced quantitative courses. Students will gain valuable statistical computing skills via stats software.					
* Proposed Course Description for Bulletin:					
The course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare for more advanced quantitative courses. Students will gain valuable statistical computing skills via stats software.					
j. Current Prerequisites, if any:					
Prereq: EDP/EPE 557 or equivalent					
* Proposed Prerequisites, if any:					
Prereq: EDP/EPE 557 or equivalent					
*					
k. Current Supplementary Teaching Component, if any:				<input type="checkbox"/> Community-Based Experience	

	<input type="radio"/> Service Learning <input type="radio"/> Both
Proposed Supplementary Teaching Component:	<input type="radio"/> Community-Based Experience <input type="radio"/> Service Learning <input type="radio"/> Both <input type="radio"/> No Change
3. Currently, is this course taught off campus?	<input type="radio"/> Yes <input checked="" type="radio"/> No
* Proposed to be taught off campus?	<input type="radio"/> Yes <input checked="" type="radio"/> No
If YES, enter the off campus address: NA	
4.* Are significant changes in content/student learning outcomes of the course being proposed?	<input type="radio"/> Yes <input checked="" type="radio"/> No
If YES, explain and offer brief rationale: NA	
5. Course Relationship to Program(s).	
a.* Are there other depts and/or pgms that could be affected by the proposed change?	<input type="radio"/> Yes <input checked="" type="radio"/> No
If YES, identify the depts. and/or pgms: This course is taken by students from all departments in the College of Education. Students from other colleges on campus often take it as an elective, but to our knowledge is not required.	
b.* Will modifying this course result in a new requirement ^Z for ANY program?	<input type="radio"/> Yes <input checked="" type="radio"/> No
If YES ^Z , list the program(s) here: NA	
6. Information to be Placed on Syllabus.	
a. <input type="checkbox"/> Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and you must include the differentiator undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and establishing different grading criteria in the course for graduate students. (See SR 3.1.4.)

Distance Learning Form

This form must accompany every submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for distance learning. **Fields in bold are required!**

Introduction/Definition: For the purposes of the Commission on Colleges Southern Association of Colleges and Schools accreditation review, **distance learning** is defined as an educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous. A distance learning (DL) course may employ correspondence study, or audio, video, or computer technology.

A number of specific requirements are listed for DL courses. **The department proposing the change in delivery method is responsible for ensuring that the requirements are satisfied at the individual course level.** It is the responsibility of the instructor to have read and understood the university-level assurances regarding an equitable experience for students utilizing DL (available at <http://www.uky.edu/USC/News/forms.htm>).

Course Number and Prefix: EDP/EPE 558	Date: 10/3/2013
Instructor Name: Michael Toland	Instructor Email: toland.md@uky.edu
Check the method below that best reflects how the majority of the course content will be delivered.	
Internet/Web-based <input checked="" type="checkbox"/>	Interactive Video <input type="checkbox"/> Hybrid <input type="checkbox"/>

Curriculum and Instruction

- How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University of Kentucky Distance Learning Syllabus Guidelines, specifically the Distance Learning Considerations?
EDP/EPE 557 - GATHERING, ANALYZING, AND USING EDUCATIONAL DATA II (see attached syllabus) conforms to all University of Kentucky Distance Learning Syllabus Guidelines and specifically includes information about virtual

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 go assessment of student learning outcomes, etc.
The course is designed to be delivered online, through asynchronous learning technology systems. The Distance Learning experience for students enrolled in this course is based on a cohort model and will be comparable to
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; acad offense policy; etc.
This online course will use University of Kentucky technology that protects the integrity of student work. The course will not require the use of examination proctors
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 a DL, as defined above?
No
- Which percentage, and which program(s)?
NA
- *As a general rule, if approval of a course for DL delivery results in 50% or more of a program being delivered through DL, the effective date of the course's DL deli six months from the date of approval.
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 se
All students in this online course have equal access to all student services at the University of Kentucky for which they qualify and those student services are similar to those available to individuals taking this class in

Library and Learning Resources

6. How do course requirements ensure that students make appropriate use of learning resources?
In addition to purchasing required textbooks, selected readings will be available through the University of Kentucky Libraries online reserve system or posted on the course website. Additionally, the program will provide
7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.
Access is provided via students' personal computer proxy access to online library resources (see syllabus).

Student Services

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/ of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?
Students are informed of the availability of University of Kentucky services in the syllabus (CELT, Blackboard, Canvas) help desk UK IT Customer Service Center as described in the syllabus. Blackboard / Canvas instructors
9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)?
 Yes
 No
- If no, explain how students 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.
Students will have access to the course content via Blackboard, supported by UKIT and CELT (the TASC successors)
10. Does the syllabus contain all the required components, below? Yes
- Instructor's *virtual* office hours, if any.
 - The technological requirements for the course.
 - Contact information for Distance Learning programs (<http://www.uky.edu/DistanceLearning>) and Information Technology Customer Service Center (<http://www.uky.edu/UKIT/help/>; 859-218-HELP).
 - Procedure for resolving technical complaints.
 - Preferred method for reaching instructor, e.g. email, phone, text message.
 - Maximum timeframe for responding to student communications.
 - Language pertaining academic accommodations:
 - "If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Res Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide me with a Letter of Accommodation which details the recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director at 859-257-2754 or jkarnes@email.uky.edu."
 - Specific dates of face-to-face or synchronous class meetings, if any.
 - Information on Distance Learning Library Services (<http://www.uky.edu/Libraries/DLIS>)
 - Carla Cantagallo, DL Librarian
 - Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)
 - Email: dllservice@email.uky.edu
 - DL Interlibrary Loan Service: http://www.uky.edu/Libraries/libpage.php?web_id=253&lib_id=16
11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.
Instructor Name:
Michael Toland

Abbreviations: DLP = Distance Learning Programs ATG = Academic Technology Group Customer Service Center = 859-218-HELP (<http://www.uky.edu/UKIT/Help>)

Revised 8/09

- Ⓜ See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "n form will be sent to appropriate academic Council for normal processing and contact person is informed.
- Ⓜ Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.
- Ⓜ Signature of the chair of the cross-listing department is required on the Signature Routing Log.
- Ⓜ Removing a cross-listing does not drop the other course – it merely unlinks the two courses.
- Ⓜ Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1.)
- Ⓜ You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.
- Ⓜ In order to change a program, a program change form must also be submitted.

Submit as New Proposal Save Current Changes

SYLLABUS

EDP/EPE 558 Gathering, Analyzing, & Using Educational Data II

University of Kentucky
College of Education
Fall 2013
Monday & Wednesday 2:00-3:15 pm
Section 001
Chemistry-Physics Building 287 CP

Instructor: Michael Toland, Ph.D.

Office: 243 Dickey Hall

Phone: 257-3395

E-mail: (preferred) toland.md@uky.edu

Office hours: by appointment

Appointments can be requested by e-mail or phone

Course Overview:

This course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals of this course include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare students for more advanced quantitative courses. Students will gain valuable statistical computing skills using SPSS and sometimes Excel.

The course aims to provide students with an introduction to a variety of statistical tests and procedures. Although this is a statistics-oriented course, the course does not emphasize statistical formulas and mathematical derivations of statistical techniques. Rather, this course focuses on the *use* and application of statistical techniques in the analysis of data. However, formulas will be presented to help enlighten the meaning of techniques, but not the sole focus. The course is structured so concepts and sample analyses are overviewed, and then students will be given opportunities to gain hands-on experience with statistical software. In the long run, this course will build a foundation for choosing and conducting statistical analyses for practice and research (after taking other, more advanced, statistics courses).

Statistics plays a pivotal role in research and understanding the various methods will help you become a better consumer and researcher. It is my job, and my goal, to help you understand and be able to implement basic statistical techniques used in education, evaluation, and psychology, and I will do my best to make it fun and interesting for you. I expect you to do your best to learn what we are covering in this course and eventually apply what you have learned to your life, research, and as a user of statistics. It is assumed that you will participate in each class session, complete assessments, ask for help if you have questions, and stay on task. The easiest way to stay on task is to keep up with readings, assessments, and participate in class regularly.

Learning Outcomes:

- Develop an understanding of basic statistical concepts, terms, principles, and symbols
- Understand descriptive, comparative, and relationship statistics
- Learn how to analyze, interpret, and summarize data appropriately
- Learn how input data, check for errors, and analyze statistical output
- demonstrate the correct use of statistical procedures by hand and with SPSS
- Identify when to use a statistical procedure
- Describe when and how to use a statistical procedure
- Critique conclusions produced by others
- Learn how to ask and answer appropriate statistical questions
- Understand statistical assumptions and how to statistically test them
- Know how to apply statistical procedures to educational problems
- Gain requisite knowledge necessary to learn more complex statistical techniques

Prerequisite:

EDP/EPE 557 or equivalent; undergraduate (with permission) or graduate status in the College of Education

Required Text:

Corty, E. W. (2014). *Using and interpreting statistics: A practical text for the behavioral, social, and health sciences* (2nd ed.). New York, NY: Worth.

Suggested Texts:

Basically, you should read widely. If you want to understand these techniques and know how to use them correctly, you need to read a number of sources and examples.

Gravetter, F. J., & Wallnau, L. B. (2009). *Essentials of Statistics for the Behavioral Sciences* (6th ed.). Belmont, CA: Wadsworth

Urduan, T. C. (2005). *Statistics in Plain English* (2nd ed). Mahwah, NJ: Lawrence Erlbaum Association.

Supplemental:

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Required Materials:

A simple nonprogrammable calculator that has a log function and a square root function.

Online Materials:

All materials (Lectures, Assessments, etc.) for this course will be posted on blackboard (<http://elearning.uky.edu>). Additional course readings, materials, and/or handouts will be provided by the Instructor as needed. It is the student's responsibility to review and print out upcoming lecture materials and any other needed materials before coming to each class meeting.

Software:

SPSS 21 will be the primary software used to conduct most analyses in this course unless otherwise specified. To find out lab hours and which labs have SPSS go to:

<http://www.uky.edu/SCS/>

Current students can download SPSS for their home computer or laptop by going to: <http://download.uky.edu>, entering their link blue id and username, search for SPSS, click on the link labeled "click here" for SPSS Windows to obtain the license information, and then once license codes come via e-mail you can download SPSS.

Additional software may be used to demonstrate techniques as needed. Additional software will include *Mplus*, SAS, Excel, R, and GPower. *Mplus* is available on 3 computers in the ITC lab located in 151 of the Taylor Education Building. A demo version of *Mplus* is also available at www.statmodel.com which can be downloaded and used on your home computer or laptop. The user manual is also available on www.statmodel.com. SAS and Excel are available in most computer labs on campus, while R is a free downloadable software program. GPower for learning statistical power and sample size determination is available for free at <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/>

Also, students wanting to master the various statistical programs available to them are encouraged to learn how to complete the analyses in other statistical programs like SAS, R (R: <http://www.r-project.org/> - a free graphics editor for R can be found at <http://sciviews.org/Tinn-R>), or *Mplus* (www.statmodel.com). Then, you can compare your results from the same analysis conducted in multiple programs. Although this seems like extra work, employers are often inclined to look at a candidate more closely when they show versatility in statistical programs, which you can highlight on your vitae.

In general, it is your responsibility to gain access to software outside of class as there will not be sufficient time in class to complete required assignments. Any student needing assistance or encountering problems should contact the instructor as soon as possible.

Grading:

Grades will be calculated based on a weighted average of grades on the exams and projects using the following criteria. Note that this is subject to change at the instructor's discretion.

Assessment for Undergraduates	Percentage
Homework (with full credit redo; 10% each)	50%
Quizzes (with ½ credit rebuttals; 5% each)	25%
Comprehensive Final Exam (25%)	25%
Assessment for Graduate Students	Percentage
Homework (with full credit redo; 10% each)	50%
Quizzes (with ½ credit rebuttals; 5% each)	25%
Comprehensive Final Exam (25%)	25%

Course grades will be earned as follows. This is subject to change at the instructor's discretion.

Course Grades for Graduates

- A: $90\% \leq \text{Final Course \%} \leq 100\%$
- B: $80\% \leq \text{Final Course \%} < 90\%$
- C: $70\% \leq \text{Final Course \%} < 80\%$
- E: $\text{Final Course \%} < 70\%$

Course Grades for Undergraduates

- A: $90\% \leq \text{Final Course \%} \leq 100\%$
- B: $80\% \leq \text{Final Course \%} < 90\%$
- C: $70\% \leq \text{Final Course \%} < 80\%$
- D: $60\% \leq \text{Final Course \%} < 70\%$
- E: $\text{Final Course \%} < 60\%$

Audit Credit

Undergraduate and graduate students who enrolled for “audit” do not have to take the comprehensive final exam, but they must attend **at least 80%** of the classes for the term, participate in class discussions, and complete all homework and quizzes. Failure to do so will result in a denial of audit credit and be awarded a grade of W.

Course Assessments:

1. Homework: Students will complete homework covering a major topic or set of topics covered in the course. Typically, you will be given a dataset(s) and expected to perform the appropriate analyses, report your findings, and interpret them accordingly. Homework may also consist of finding a peer reviewed study, discussing the analyses conducted, reporting and interpreting those findings, and critiquing the study. Also, you may be required to write up a brief Results section in appropriate APA style. You may also be asked to provide a critique of a research study. Finally, homework may consist of additional questions covering the major topic(s). Homework will be returned within one week. Also, in the spirit of helping you master the material you will be given the option of reworks. Specifically, homework may be reworked once for parts that did not receive full credit, but any part that was not initially attempted by the original homework due date cannot be redone for credit. Reworks are due within two weeks of the original homework due date. You are to submit your original graded homework along with the questions you reworked. If you do not include the original graded homework, I will not grade your reworked homework. You are to work alone on homework.

2. Quizzes: Each short quiz will consist of multiple choice questions and will not be cumulative. For each quiz you will only be allowed to use a calculator, lecture notes, and textbook. These quizzes are not intended to be lengthy and will cover major points discussed during a certain section of the class material. All quizzes will be administered via Blackboard and students will have a 24-hour window to start the quiz and up to 2-hours to complete each quiz, although the entire allotted time will not be necessary. Quizzes will be launched on a Thursday or Friday. Details about the content of each quiz and dates will be discussed prior to each quiz. Also, in the spirit of helping you master the material you will be given the option of rebuttals. Specifically, your rebuttal for each missed question should include 2 parts: 1) why the response you chose is incorrect, and 2) why the keyed answer is correct. Now, if you don't agree with the keyed

response your rebuttal for a missed question should include 3 parts: 1) why you think your response is correct or not correct, 2) why you think the keyed response is not correct; and 3) a revision of the question (including at least 4 response choices) so that it is written in a clearer manner than originally presented. Once I have received your rebuttals I will review them, give half-credit for complete rebuttals, and update quiz 1 scores to reflect your rebuttals. Rebuttals are due within one week of the original quiz date. You are to work alone on quizzes.

3. Comprehensive Final Exam: The Final Exam is **CUMULATIVE**. The Final Exam will consist of an outside (take home) component and in class portion consisting of multiple choice (SPSS questions included) and short answer questions. A final exam review sheet will be provided to students prior to the final exam. Students will be allowed to use one 9-by-11 inch piece of paper (front and back) to write down formulas, but definitions for terms will **NOT** be allowed. This crib sheet will be turned in with the final exam. If anything more than formulas are found to be on the crib sheet the student will be assigned a zero for the final in class portion of the exam.

Course Policies, Procedures, & Important Details:

1. Learning/Classroom Accommodations: If you have a documented disability that requires academic accommodations, please contact 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) for coordination of campus disability services available to students with disabilities.

The course will be conducted with openness and respect to all individuals' points of view and experience. The activities and discussions will not tolerate discrimination or prejudice toward any person or group's religion, ethnicity, disability, gender, or sexual orientation.

2. Statement of Diversity. Given the diverse world that we live in, students are asked to demonstrate a personal commitment to being knowledgeable, aware, and respectful of cultural diversity, culturally appropriate research, and how experiences (their own and others) of privilege and oppression impact interpersonal communication and social justice. Students are encouraged to challenge themselves to grow and change in ways that make themselves more culturally- and socially-competent learners.

3. Ethics: Students are allowed and strongly encouraged to discuss in pairs or groups the homework, but they are expected to turn in their own independent work which should be phrased in their own words. So, make sure your words for given assessments are not closely aligned with the wording used by others. Also, you are not to share your completed homework answers with other students as homework is allowed to be reworked.

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 assessment (e.g., quiz, homework, exam, project) 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 <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.

Students are expected to be familiar with the University of Kentucky Code of Student Rights & Responsibilities which can be found at:

<http://www.uky.edu/StudentAffairs/Code/part1.html>

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

4. Attendance, Participation, and Disruptions: You are expected to come to all classes on-time, complete readings, and participate in all activities and discussions. The instructor understands that some absences are unpreventable. However, students missing in excess over one-fifth of class meetings will result in a denial of course credit and be awarded a grade of W for the course. The following are non-penalized acceptable reasons for missing class beyond the one exception: serious illness, illness or death of family member, University-related trips, major religious holidays, and other circumstances the instructor finds to be reasonable cause for nonattendance. If warranted, the instructor will ask for verification of a missed class. Be sure to **turn off** your cell phone prior to each class. Avoid being tardy, as arriving late to class disturbs the other class members and instructor.

5. Submission of Work: All assessments are due on the due date specified in the course schedule via e-mail. **LATE ASSESSMENTS WILL BE ACCEPTED AT THE SOLE DISCRETION OF THE INSTRUCTOR.** Exceptions will be made ONLY in extreme circumstances, such as (but not limited to) an incapacitating illness or injury, or a death in the family. Since the course materials are posted on Blackboard, events such as (but not limited to) vacation/travel plans, social obligations, or family gatherings do not constitute exceptions. Turn in all work using the last 4 digits of your UK student identification number. **DO NOT WRITE YOUR NAME ON ANY ASSESSMENT IN THIS COURSE.** All work should follow current APA guidelines.

6. Class Sessions: The amount of time spent in class will differ by topic; class may or may not last the entire time allotted. However, the Instructor may decide to start the next topic on the course schedule pending class time. The Instructor is available before, during, and after the scheduled time for this course, and by appointment, to address student questions or concerns. Each class session will generally consist of lecture, class discussions, and in-class activities.

7. Posting of Grades: All assessments will be graded and returned to students. All assessment scores will be posted on Blackboard in a timely manner so that students are aware of their progress in the course.

8. Communication: The instructor will communicate on a regular basis via e-mail. You will be expected to check your e-mail (and blackboard) at least daily for course related updates and information. If you need to communicate with the Instructor, please use the title **Statistics II** in the subject line of your e-mail.

TENTATIVE COURSE SCHEDULE

Date	Topic	Pre-Class Reading Assignment	Products Due
8/28	Introduction to Statistics	Ch. 1	
9/2	No Class		
9/4	Introduction to Statistics	Ch. 1	
9/9	Research Design	Ch. 1	Introduction to Statistics Practice*
9/11	Sampling Methods		Research Design Practice* Quiz #1
9/16	Displaying Data	Ch. 2	Sampling Methods Practice*
9/18	Displaying Data	Ch. 2	Homework #1
9/23	Central Tendency	Ch. 3	Displaying Data Practice*
9/25	Variability	Ch. 3	Central Tendency Practice*
9/30	Variability	Ch. 4	Central Tendency Practice*
10/2	5-Number Summary & Boxplots		Variability Practice* Quiz #2
10/7	Skewness & Kurtosis		5-Number Summary & Boxplots Practice*
10/9	Standard Scores	Ch. 4	Homework #2
10/14	Normal Distributions	Ch. 4	
10/16	Sampling Distributions	Ch. 5	Standard Scores & Normal Distribution Practice
10/21	Sampling Distributions	Ch. 5	
10/23	Hypothesis Testing	Ch. 6	Quiz #3
10/28	One-Sample z test		
10/30	One-Sample t test	Ch. 7	One Sample z test

			practice* Quiz #4
11/4	Independent t test	Ch. 8	One Sample t test practice*
11/6	Dependent t test	Ch. 9	Homework #3
11/11	ANOVA	Ch. 10	
11/13	ANOVA	Ch. 10	Quiz #5
11/18	ANOVA & Effect Sizes	Ch. 10	
11/20	Correlation	Ch. 13	Homework #4
11/25	Regression	Ch. 14	
11/27	NO CLASS		
12/2	Regression	Ch. 14	
12/4	Regression	Ch. 14	Homework #5
12/9	Chi-square & Other Nonparametric tests	Ch. 15	
12/11	Chi-square & Other Measures of Association	Ch. 15	
12/16	Comprehensive Final Exam (10:30 am -12:30 pm)	Chs. 1-16	

Note. Readings are from the required textbook:

Corty, E. W. (2014). *Using and interpreting statistics: A practical text for the behavioral, social, and health sciences* (2nd ed.). New York, NY: Worth.

*Not graded or to be given to instructor; check your answers with key; ask Instructor questions to clarify understanding.

SYLLABUS

EDP/EPE 558 Gathering, Analyzing, & Using Educational Data II

University of Kentucky

College of Education

Fall 2013

Monday & Wednesday 2:00-3:15 pm

Section 201

Location/Format: Online course delivery - Asynchronous

Instructor Information:

Michael Toland, Ph.D.

Office: 243 Dickey Hall

Phone: 859-257-3395

E-mail: toland.md@uky.edu (preferred method of communication)

Campus office hours: by appointment

Virtual office hours: by appointment

Appointments can be requested by phone or via e-mail (preferred)

Skype ID: toland.md

Course Website:

<https://elearning.ukv.edu> or Blackboard

Login using your link blue username and password

Please check our course website (i.e., announcements and discussion boards) and your e-mail account daily for course information.

Course Description:

The course covers applications of statistical and graphical methods for educational and evaluation data. Topics to be covered include descriptive statistics, correlation, normal distributions, hypothesis testing, regression, ANOVA, and power. General goals include: developing an understanding of statistical concepts, improving reasoning and critical thinking skills, and to prepare for more advanced quantitative courses. Students will gain valuable statistical computing skills via stats software.

The course aims to provide students with an introduction to a variety of statistical tests and procedures. Although this is a statistics-oriented course, the course does not emphasize statistical formulas and mathematical derivations of statistical techniques. Rather, this course focuses on the *use* and application of statistical techniques in the analysis of data. However, formulas will be presented to help enlighten the meaning of techniques, but not the sole focus. The course is structured so concepts and sample analyses are overviewed, and then students will be given opportunities to gain hands-on experience with statistical software. In the long run, this course will build a foundation for choosing and conducting statistical analyses for practice and research (after taking other, more advanced, statistics courses).

Statistics plays a pivotal role in research and understanding the various methods will help you become a better consumer and researcher. It is my job, and my goal, to help you understand and be able to implement basic statistical techniques used in education, evaluation, and

psychology, and I will do my best to make it fun and interesting for you. I expect you to do your best to learn what we are covering in this course and eventually apply what you have learned to your life, research, and as a user of statistics. It is assumed that you will participate in each class session, complete assessments, ask for help if you have questions, and stay on task. The easiest way to stay on task is to keep up with readings, assessments, and participate in class regularly.

Student Learning Objectives:

- Demonstrate an understanding of basic statistical concepts, terms, principles, and symbols
- Demonstrate an understanding of descriptive, comparative, and relationship statistics
- Demonstrate how to analyze, interpret, and summarize data appropriately
- Demonstrate how input data, check for errors, and analyze statistical output
- Demonstrate the correct use of statistical procedures by hand and with SPSS
- Identify when to use a statistical procedure
- Describe when and how to use a statistical procedure
- Critique conclusions produced by others
- Demonstrate how to ask and answer appropriate statistical questions
- Understand statistical assumptions and how to statistically test them
- Demonstrate how to apply statistical procedures to educational problems
- Demonstrate an understanding of requisite knowledge necessary to learn more complex statistical techniques

Integration of Syllabus with UK College of Education Conceptual Framework:

This course addresses the four themes within the conceptual framework of the UK College of Education: *research*, *reflection*, *learning*, and *leading*. Throughout the course students have opportunities to review, analyze, discuss, and apply *research* from diverse perspectives in education, including professional scholarship and practitioner inquiry and reflect on their own practices as educators or future educators as they study, observe, and work in education. *Reflection* is integrated regularly through written communication to help students hone their analytical and problem-solving skills that comprise critical professional reflection on one's own practice. This course emphasizes the commitment of the UK College of Education to ensure that its graduates continue their professional careers equipped for life-long *learning* as educators actively *leading* colleagues in their schools, districts, and/or profession. The ultimate goal in addressing these four themes is to produce educational leaders who work together to improve student learning among diverse populations and improve education in Kentucky and beyond.

Expectations and How to Succeed in This Course:

In a regular course, you meet for about three hours of class time and are expected to devote two to three hours per week per credit outside of class time. Thus, a typical course consumes about 9 to 12 hours of your time per week over a 15 week semester. This course is constructed to meet these expectations! It is usually helpful to schedule blocks of time during each week for your participation in the course, much as you would if you were coming to campus for a class or meeting a study group for a beverage. **It is not true that virtual/online courses require less time or effort than a face-to-face course! Be ready to learn!**

Prerequisite:

EDP/EPE 557 or equivalent

Required Text:

Corty, E. W. (2014). *Using and interpreting statistics: A practical text for the behavioral, social, and health sciences* (2nd ed.). New York, NY: Worth.

Suggested Texts:

Basically, you should read widely. If you want to understand these techniques and know how to use them correctly, you need to read a number of sources and examples.

Gravetter, F. J., & Wallnau, L. B. (2009). *Essentials of Statistics for the Behavioral Sciences* (6th ed.). Belmont, CA: Wadsworth

Urdan, T. C. (2005). *Statistics in Plain English* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Association.

Supplemental:

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Required Materials:

A simple nonprogrammable calculator that has a log function and a square root function.

Additional Course Readings

Additional readings related to course content will be assigned throughout the course via e-mail, course announcements, or as listed in the course schedule. These additional course readings may include articles, cases, blogs, wikis, online resources, and videos. When such readings are required, they will be provided by the instructor in advance. Additional readings may be assigned throughout the course duration. Most required materials for this course are available on the blackboard site (<https://elearning.uky.edu>).

Required Statistical Software:

SPSS 21 will be the primary software used to conduct most analyses in this course unless otherwise specified. To find out lab hours and which labs have SPSS go to:

<http://www.uky.edu/SCS/>

Current students can download SPSS for their home computer or laptop by going to: <http://download.uky.edu>, entering their link blue id and username, search for SPSS 21, click on the link labeled "click here" for SPSS 21 Windows to obtain the license information, and then once license codes come via e-mail you can download SPSS 21.

Additional software may be used to demonstrate techniques as needed. Additional software will include *Mplus*, SAS, Excel, R, and GPower. *Mplus* is available on 3 computers in the ITC lab located in 151 of the Taylor Education Building. A demo version of *Mplus* is also available at www.statmodel.com which can be downloaded and used on your home computer or laptop. The user manual is also available on www.statmodel.com. SAS and Excel are available in most computer labs on campus, while R is a free downloadable software program. GPower for learning statistical power and sample size determination is available for free at

<http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/>

Also, students wanting to master the various statistical programs available to them are encouraged to learn how to complete the analyses in other statistical programs like SAS, R (R: <http://www.r-project.org/> - a free graphics editor for R can be found at <http://sciviews.org/Tinn-R>), or *Mplus* (www.statmodel.com). Then, you can compare your results from the same analysis conducted in multiple programs. Although this seems like extra work, employers are often inclined to look at a candidate more closely when they show versatility in statistical programs, which you can highlight on your vitae.

In general, it is your responsibility to gain access to software. Any student needing assistance or encountering problems should contact the instructor as soon as possible.

Required Instructional Technology:

This course requires use of information technology. Students are expected to have regular access to a personal computer with audio capabilities, the internet to complete their learning activities, Microsoft Word, PowerPoint and, Excel, Adobe Reader, and a high quality webcam and headset to complete their learning activities. All Web-based activities are to be completed within designated sections of the course site (e.g., Blackboard, google document).

All materials (Notes, Assessments, etc.) for this course will be posted on blackboard (<https://elearning.uky.edu>). Additional course readings, materials, and/or handouts will be provided by the instructor as needed.

Teaching and Academic Support:

Contact the Teaching and Academic Support Center at <http://www.uky.edu/TASC/index.php> or 859-257-8772

Procedures to Resolve Technical Problems:

Contact the Information Technology Customer Service Center at <http://www.uky.edu/UKIT/> or 859-257-1300

Information on Distance Learning Library Services:

- <http://www.uky.edu/Libraries/DLLS>
- Carla Cantagallo, DL Librarian
- Local phone number: 859-257-0500, ext. 2171
- long-distance phone number: (800) 828-0439 (option #6)
- Email: dllservice@email.uky.edu
- DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

Student Menu of Blackboard Support:

- <http://wiki.uky.edu/blackboard/Wiki%20Pages/Home.aspx>.
- Local phone number: (859) 257-1300
- Email: helpdesk@uky.edu

Other Technical Assistance or Complaints:

College of Education Instructional Technology Center

- 859-257-7967

Information Technology Customer Service Center

- <http://www.uky.edu/UKIT/Help/>
 - 859-218-HELP
- Distance Learning programs for assistance
- <http://www.uky.edu/DistanceLearning>

Grading:

Grades will be calculated based on a weighted average of grades on the homework, quizzes, and exams using the following criteria.

Assessment for Undergraduates	Percentage
Homework (with full credit redo; 10% each)	50%
Quizzes (with ½ credit rebuttals; 5% each)	25%
Comprehensive Final Exam (25%)	25%

Assessment for Graduate Students	Percentage
Homework (with full credit redo; 10% each)	50%
Quizzes (with ½ credit rebuttals; 5% each)	25%
Comprehensive Final Exam (25%)	25%

Course Grades for Graduates

- A: $90\% \leq \text{Final Course \%} \leq 100\%$
- B: $80\% \leq \text{Final Course \%} < 90\%$
- C: $70\% \leq \text{Final Course \%} < 80\%$
- E: $\text{Final Course \%} < 70\%$

Course Grades for Undergraduates

- A: $90\% \leq \text{Final Course \%} \leq 100\%$
- B: $80\% \leq \text{Final Course \%} < 90\%$
- C: $70\% \leq \text{Final Course \%} < 80\%$
- D: $60\% \leq \text{Final Course \%} < 70\%$
- E: $\text{Final Course \%} < 60\%$

Midterm Evaluation

Each student will be receiving a mid-term evaluation that will summarize each person's progress in the course, but there is no midterm Exam.

Course Assessments:

1. Homework: Students will complete homework covering a major topic or set of topics covered in the course. Typically, you will be given a dataset(s) and expected to perform the appropriate analyses, report your findings, and interpret them accordingly. Homework may also consist of finding a peer reviewed study, discussing the analyses conducted, reporting and interpreting those findings, and critiquing the study. Also, you may be required to write up a brief Results section in appropriate APA style. You may also be asked to provide a critique of a research study. Finally, homework may consist of additional questions covering the major topic(s). Homework will be returned within one week. Also, in the spirit of helping you master the

material you will be given the option of reworks. Specifically, homework may be reworked once for parts that did not receive full credit, but any part that was not initially attempted by the original homework due date cannot be redone for credit. Reworks are due within two weeks of the original homework due date. You are to submit your original graded homework along with the questions you reworked. If you do not include the original graded homework, I will not grade your reworked homework. You are to work alone on homework. All homework is made available via Blackboard and students will post original and revised/redo homework via Blackboard.

2. Quizzes: Each short quiz will consist of multiple choice questions and will not be cumulative. For each quiz you will only be allowed to use a calculator, lecture notes, and textbook. These quizzes are not intended to be lengthy and will cover major points discussed during a certain section of the class material. All quizzes will be administered via Blackboard and students will have a 24-hour window to start the quiz and up to 2-hours to complete each quiz, although the entire allotted time will not be necessary. Quizzes will be launched on a Thursday or Friday. Details about the content of each quiz and dates will be discussed prior to each quiz. Also, in the spirit of helping you master the material you will be given the option of rebuttals. Specifically, your rebuttal for each missed question should include 2 parts: 1) why the response you chose is incorrect, and 2) why the keyed answer is correct. Now, if you don't agree with the keyed response your rebuttal for a missed question should include 3 parts: 1) why you think your response is correct or not correct, 2) why you think the keyed response is not correct; and 3) a revision of the question (including at least 4 response choices) so that it is written in a clearer manner than originally presented. Once I have received your rebuttals I will review them, give half-credit for complete rebuttals, and update quiz 1 scores to reflect your rebuttals. Rebuttals are due within one week of the original quiz date. You are to work alone on quizzes. All quizzes will be made available via Blackboard and students will post rebuttals via Blackboard.

3. Comprehensive Final Exam: The Final Exam is **CUMULATIVE**. The Final Exam will consist of an outside (take home) component (provided to students one week prior to the final exam) and online class portion consisting of multiple choice (SPSS questions included) and short answer questions completed the day of the scheduled final exam via blackboard. A final exam review sheet will be provided to students prior to the final exam.

UK Policies

The adopted UK academic policies apply in this course and are articulated in the *Students Rights and Responsibilities Handbook* and the *UK Graduate Bulletin*. Important policies and regulations applicable to this course include, but are not limited to, those concerning attendance, cheating and plagiarism, course withdrawal, incomplete grades, and acceptable standards of English. As the instructor, I retain absolute discretion concerning acceptance of required assessments after established due dates and reserve the right to lower grades on assessments submitted late.

Commitment to Diversity:

Given the diverse world that we live in, students are asked to demonstrate a personal commitment to being knowledgeable, aware, and respectful of cultural diversity, culturally appropriate research, and how experiences (their own and others) of privilege and oppression

impact interpersonal communication and social justice. Students are encouraged to challenge themselves to grow and change in ways that make themselves more culturally- and socially-competent learners. The course will be conducted with openness and respect to all individuals' points of view and experience. The activities and discussions will not tolerate discrimination or prejudice toward any person or group's religion, ethnicity, disability, gender, or sexual orientation.

Learning Accommodations:

If you have a documented disability that requires academic accommodations, please contact me as soon as possible. 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, 859-257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

Absences and Late Submittals:

Required readings and assessments are provided in the course calendar/schedule. You are expected to complete all readings and participate in all activities and discussions via blackboard. The instructor understands that some absences are unpreventable. The following are non-penalized acceptable reasons for missing course work and contributions to Blackboard discussions: (a) serious illness, (b) illness or death of family member, (c) university-related trips, (d) major religious holidays, and (e) other circumstances that the instructor finds to be "reasonable cause for nonattendance." Because the course does not have specific meeting times, regular participation is essential. If students must miss a scheduled task (e.g., Homework, Quiz, Exam, Blackboard posting), they must notify me about the reason for the absence **before it occurs**. In the event of **emergency absences** (e.g., personal illness, major accident, death of family member), students should notify the instructor as soon as possible, **preferably through e-mail communication**. Additional assessments may be required for missed tasks.

Incomplete Grade:

Incomplete grades for this course are issued reluctantly and sparingly. The university permits students **one calendar year—unless a shorter time frame is determined mutually by the student and instructor**—to remove an "I" grade. If the contracted work is not completed satisfactorily, the "I" grade converts automatically to an "E" (a failing mark). UK rules require students requesting an "I" grade to complete a contract specifying how and when the "I" will be removed within the calendar year. The contract must be submitted to the course instructor before an "I" grade can be issued. Incomplete work and missing assessments will be assigned "E" grades if the student does not submit a completed Incomplete Grade Contract by the time the course ends.

Quality of Student Work:

Unless specified otherwise, all work submitted to the instructor must be presented in the writing style and format described in the most recent edition of the *Publication Manual of the American Psychological Association*. All papers must be word-processed in **Times New Roman 12-point font and doubled-spaced**. Students are expected to follow rules of usage and the academic writing guidelines in the most recent edition of the *APA Manual*.

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Ethics:

Students are allowed and strongly encouraged to discuss in pairs or groups the projects, but not the Exams. Work on an Exam is expected to be your own independent work. Also, you are not to share your completed assessment answers with other students as assessment work is allowed to be reworked. When in doubt, ask the instructor for clarification.

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 assessment (e.g., homework, exam, project) 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 <http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructor or other academic supervisor 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 instructor on the matter before submission.

Students are expected to be familiar with the University of Kentucky Code of Student Rights & Responsibilities which can be found at:

<http://www.uky.edu/StudentAffairs/Code/part1.html>

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

Submission of Work:

Unless otherwise noted all assessments are due via Blackboard by 9 pm Eastern Standard Time (EST) on the due date specified in the course schedule. **LATE ASSESSMENTS WILL BE ACCEPTED AT THE SOLE DISCRETION OF THE INSTRUCTOR.** Exceptions will be made **ONLY** in extreme circumstances, such as (but not limited to) an incapacitating illness or injury, or a death in the family. Since the course materials are posted on Blackboard, events such as (but not limited to) vacation/travel plans, social obligations, or family gatherings do not constitute exceptions. Turn in all work using the last 4 digits of your UK student identification number. **DO NOT WRITE YOUR NAME ON ANY ASSESSMENT IN THIS COURSE.**

Course Format/Structure:

The course is structured so that students can learn at their own pace, but are expected to meet the due dates outlined in the course schedule. Students are expected to participate in online

class discussions/forums, complete assessments, ask for help if they have questions, and stay on task. The easiest way to stay on task is to:

- (1) complete required readings,
- (2) review (lecture) notes (both audio and non audio Powerpoint notes),
- (3) review SPSS video tutorials provided by the instructor for a given statistical analysis,
- (4) respond to discussion board threads via Blackboard by posing questions and providing comments for a given topic,
- (5) complete assessments on-time.

Class Participation via Discussion Board Threads/Forums:

Due to the course format, schedule and content, participating in online discussion board threads is essential to your learning. Students are encouraged to participate in all class discussions via Blackboard. Although participation is not graded in this course, you are required to respond to online discussion board threads and engage in asynchronous dialogue with the course community. Ultimately, it is up to you to decide how you respond to the online discussions, but the more you participate the more you can learn from the course, the online community, and the instructor.

However, students missing in excess of one-fifth (20%) of class discussions on Blackboard will result in a denial of course credit and will be awarded a grade of W for the course. To ensure you do not receive a grade of W you must provide complete and thoughtful responses to discussion board threads.

Discussion board threads/forums will be created in Blackboard. Students must respond to the discussion board thread (post) thoughtfully by mid-night EST of the posted due date in the course schedule after carefully reading materials pertinent to the discussion board thread.

Discussion Board threads/forums are available within the Blackboard course by clicking on the link labeled **Discussions**.

Group Forums:

If you would like, the instructor can create a form for those wanting to form study groups to learn together. Just e-mail the instructor with each student's name within the group. Just let me know how I can help. I want you to learn and not just get a grade, and forming learning groups is the best way to learn some of the topics in this course.

Posting of Grades:

All assessments will be graded and returned to students. All assessment scores will be posted on Blackboard in a timely manner so that students are aware of their progress in the course.

Communication:

The instructor will communicate on a regular basis via e-mail and blackboard announcements. You will be expected to check your e-mail (and blackboard) daily for course related updates and information. If you need to communicate with the instructor, please use the title **558** in the subject line of your e-mail.

Maximum Timeframe for Responding to Student Communication:

Students may expect the instructor to have responses to email, phone, and blackboard inquiries within 48 hours excluding weekends.

Changes to the Syllabus:

I retain the right to modify this syllabus, if necessary, to meet the learning objectives of this course. That is, when unforeseen circumstances necessitate changes, these will be negotiated with the class and will reflect the nature of the circumstances necessitating the change. For example, a severe storm causing cancelation of classes on exam day would necessitate a change in the exam date. Changes to the syllabus will be discussed with you and provided in writing as an addendum distributed electronically via e-mail and posted on the course Blackboard.

TENTATIVE COURSE SCHEDULE

Date	Topic	Pre-Class Reading Assignment Due	Blackboard Discussion Due (Check the Blackboard Discussions regularly for each Major Topic) or Major Task Due	Assessments Due
8/28	Introduction to Statistics	Ch. 1		
9/2	No Class			
9/4	Introduction to Statistics	Ch. 1	Questions/Comments about the course syllabus; About Me	
9/9	Research Design	Ch. 1	Introduction to Statistics Practice*	
9/11	Sampling Methods		Research Design Practice*	Quiz #1
9/16	Displaying Data	Ch. 2	Sampling Methods Practice*	
9/18	Displaying Data	Ch. 2		Homework #1
9/23	Central Tendency	Ch. 3	Displaying Data Practice*	

9/25	Variability	Ch. 3	Central Tendency Practice*	
9/30	Variability	Ch. 4	Central Tendency Practice*	
10/2	5-Number Summary & Boxplots		Variability Practice* Quiz #2	
10/7	Skewness & Kurtosis		5-Number Summary & Boxplots Practice*	
10/9	Standard Scores	Ch. 4		Homework #2
10/14	Normal Distributions	Ch. 4		
10/16	Sampling Distributions	Ch. 5	Standard Scores & Normal Distribution Practice*	
10/21	Sampling Distributions	Ch. 5		
10/23	Hypothesis Testing	Ch. 6		Quiz #3
10/28	One-Sample z test			
10/30	One-Sample t test	Ch. 7	One Sample z test practice*	Quiz #4
11/4	Independent t test	Ch. 8	One Sample t test practice*	
11/6	Dependent t test	Ch. 9	Independent test*	Homework #3
11/11	ANOVA	Ch. 10	Dependent t test*	
11/13	ANOVA	Ch. 10		Quiz #5
11/18	ANOVA & Effect Sizes	Ch. 10		
11/20	Correlation	Ch. 13	ANOVA*	Homework #4
11/25	Regression	Ch. 14	Correlation*	
11/27	NO CLASS			
12/2	Regression	Ch. 14		
12/4	Regression	Ch. 14		Homework #5
12/9	Chi-square & Other Nonparametric tests	Ch. 15	Regression*	
12/11	Chi-square & Other	Ch. 15	Chi-square	

	Measures of Association		& Other Measures of Association*	
12/16	Comprehensive Final Exam (10:30 am -12:30 pm)	Chs. 1-16		Final Exam

Note. Readings are from the required textbook:

Corty, E. W. (2014). *Using and interpreting statistics: A practical text for the behavioral, social, and health sciences* (2nd ed.). New York, NY: Worth.

*Not graded or to be given to instructor; check your answers with key; ask Instructor questions to clarify understanding or post questions on Blackboard within the course forum developed for that topic area.