



Department of Psychology

238 Townshend Hall
1885 Neil Avenue Mall
Columbus, OH 43210-1222

March 20, 2008

Dear Committee Members,

Please find attached a request to increase the number of credit hours for Psychology 321 (Quantitative and Statistical Methods) from 4 to 5 credit hours.

Psy 321 has become an integral component of our honors program, and many of the students enrolled in Psy 321 are taking the course to prepare them for the analysis of their thesis data. In recent years, to insure coverage of all the material that we feel should be presented in the course, and that students and faculty have requested that we cover, we have increased the class contact time from two 48 minute lectures and one 78 minute lab per week to two 78 minute lectures and one 78 minute lab per week.

As you can see from the attached syllabi, the workload requirements for Psy 321 and Psychology 320 (Introduction to Data Analyses, the precursor to Psy 321) are nearly identical. The students complete exactly the same amount of homework, readings, and attend lectures and labs of identical duration. However, Psy 320 is a 5-credit course, while Psy 321 is a 4-credit course. Therefore, we request that the credit hours for Psy 321 be increased from 4 to 5.

Sincerely,

Dr. Trisha Van Zandt
Associate Professor
(614) 688-4081

The Ohio State University

Colleges of the Arts and Sciences Course Change Request

Psychology
Academic Unit

Psychology

321

Book 3 Listing (e.g., Portuguese)

Course Number

Summer Autumn X Winter Spring Year 2008

Proposed effective date: choose one quarter and put an "X" after it; and fill in the year. See the OAA curriculum manual for deadlines.

A. Course Offerings Bulletin Information. Follow instructions in the OAA curriculum manual. Before you fill out the "Present Course" information, be sure to check the latest edition of the *Course Offerings Bulletin* and subsequent Circulating Forms. You may find that the changes you need have already been made or that additional changes are needed. If the course offered is less than quarter or term, please also complete the Flexibly Scheduled/OffCampus/Workshop Request form.

COMPLETE ALL ITEMS THIS COLUMN

Present Course

1. Book 3 Listing: Psychology
2. Number: 321
3. Full Title: Quantitative and Statistical Methods in Psychology
4. 18-Char. Transcript Title: Quant & Stat Methods
5. Level and Credit Hours: U 4
6. Description: A concentrated examination of applications of (25 words or less) statistical tools in inference in contemporary psychology ...
7. Qtrs. Offered: Autumn, Winter, Spring
8. Distribution of Contact Time: 2 78-min cl, 1 78-min recitation (e.g., 3 cl, 1 3-hr lab)
9. Prerequisite(s): Psy 100, Stat 145 or Stat 245 or Psy 320
10. Exclusion: none (Not open to...)
11. Repeatable to a maximum of 0 credits.
12. Off-Campus Field Experience: no
13. Cross-listed with: none
14. Is this a GEC course? no
15. Grade option (circle): Ltr S/U P
If P graded, what is the last course in the series?
16. a) Is an honors version of this course available? Y N
b) Is an Embedded Honors version of this course available? Y N
- c) Is this a Service Learning Course: Y N
17. Other general course information:

COMPLETE ONLY THOSE ITEMS THAT CHANGE

Changes Requested

- 1.
- 2.
- 3.
- 4.
5. U 5 – increase credit hours by 1
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
16. a)
- b)
- c)
- 17.

B. General Information

1. Do you want the prerequisites enforced electronically (see the OAA manual for what can be enforced)?
Yes
2. Does this course currently satisfy any GEC requirement? if so indicate which category.
No
3. What other units require this course? Have these changes been discussed with those units?
None
4. Have these changes been discussed with academic units that might have a jurisdictional interest in the subject matter? Attach relevant letters.
N/A
5. Is the request contingent upon other requests? if so list the requests.
No
6. Purpose of the proposed change. (If the proposed change affects the content of the course, attach a revised syllabus and course objectives and e-mail to ascurreofc@osu.edu.)
To more accurately reflect the workload of the course.

7. Please list Majors/Minors affected by the proposed change. Attach revisions of all affected programs. This course is (check one):
 Required on major(s)/minor(s) A choice on major(s)/minor(s)
 An elective within major(s)/minor(s) A general elective:
Required by the Psychology B.S., and elective for the Psychology BA

8. Describe any changes in library, equipment or other teaching aids needed as a result of the proposed change. If the proposed change involves budgetary adjustments, describe the method of funding:
None

CONTACT PERSON: T. Van Zandt EMAIL: van-zandt.2@osu.edu PHONE: x84081

Approval Process The signatures on the lines in ALL CAPS (e.g. ACADEMIC UNIT) are required.

- | | | |
|--|--------------|------|
| 1. Academic Unit Undergraduate Studies Committee Chair | Printed Name | Date |
| 2. Academic Unit Graduate Studies Committee Chair | Printed Name | Date |
| 3. ACADEMIC UNIT CHAIR/DIRECTOR | Printed Name | Date |
| 4. After the Academic Unit Chair/Director signs the request, forward the form to the ASC Curriculum Office, 4132 Smith Lab, 174 West 18 th Ave. or fax it to 688-5678. Attach the syllabus and any supporting documentation in an e-mail to ascurreofc@osu.edu . The ASC Curriculum Office will forward the request to the appropriate committee. | | |
| 5. COLLEGE CURRICULUM COMMITTEE | Printed Name | Date |
| 6. ARTS AND SCIENCES EXECUTIVE DEAN | Printed Name | Date |
| 7. Graduate School (if appropriate) | Printed Name | Date |
| 8. University Honors Center (if appropriate) | Printed Name | Date |
| 9. Office of International Affairs (study tours only) | Printed Name | Date |
| 10. ACADEMIC AFFAIRS | Printed Name | Date |

Psychology 321 (SP08)

Quantitative and Statistical Methods in Psychology

Lecture: Monday & Wednesday 10:00-11:18am
Psychology Building (PS) Room 010

Lab: Friday 10:00-11:18am
Psychology Building (PS) Room 010

Instructor: Michael Edwards
Lazenby 226
688-8030; edwards.134@osu.edu
Office Hours: Thurs 9am-10am (or by appointment)

T.A.: Carrie Houts
Lazenby 240d
houts.7@osu.edu
Office Hours: Wed 12:30pm-1:30pm, Thurs 11:00am-12:00pm

Required Text: Howell, D.C. (2008). *Fundamental Statistics for the Behavioral Sciences* (6th Edition). Belmont, CA: Thomson Wadsworth.

Course Overview

The goal of this course is to continue building your statistical knowledge in general, but especially with regards to the *t*-test and ANOVA. The lecture will cover both conceptual and computational aspects of statistics.

Lab & Software

The lab section serves several purposes. One primary purpose of the lab is to familiarize you with SPSS, a very popular piece of statistical software often used in the social sciences. Details on acquiring SPSS will be provided at the first lab meeting. In addition to learning about the software, the lab section will be used to review homework, work through additional problems, prepare for tests, and to provide another venue for you to ask questions.

Students with Disabilities

This syllabus is available in alternative forms upon request. In addition, if you may need an accommodation based on the impact of a disability, you should contact the instructor immediately. Students with special needs should contact the Office of Disability Services (ODS) for certification. Students without ODS certification will not be granted special accommodations.

Grading Policies

Your grade will be based on homework assignments and three exams. Each exam will be worth 20% of your grade and the homework assignments (approximately one per week) will be worth 40%. Your final grade will be based on a total of 500 points. The point breakdown is as follows:

- Exam 1 – 100 points
- Exam 2 – 100 points
- Exam 3 – 100 points
- Homework – 200 points

Exams

All exams will be closed-book, but you may bring one 8.5" x 11" page of notes to the exam. Statistical tables and other necessary equations will be provided. You will need a calculator for the exam. No make-up exam will be given, except in the case of *documented illness* or *emergency*. The format of the make-up will be determined by the professor, but all make-up exams must be completed no later than three business days after the missed exam.

Homework

The homework portion of your final grade will be a sum of your five *highest* individual homework scores. Homework will be due one week after it is handed out. Late homework will not be accepted.

Final Grade

Your final grade will be computed using the grading scale below.

A	A-	B+	B	B-	C+	C	C-	D+	D	E
93%	90%	87%	83%	80%	77%	73%	70%	67%	60%	<60%
465	450	435	415	400	385	365	350	335	300	<300

This should make it relatively easy for you to see how you're doing and to figure out what your final grade would be. For instance, if you have 370 points going into the final you know the lowest grade you can get is a C and that you would need a 95 on the final to get an A.

Academic Misconduct

All students at the Ohio State University are bound by the Code of Student Conduct (see http://studentaffairs.osu.edu/resource_csc.asp). Suspected violations of the code in this class will be dealt with according to the procedures detailed in that code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct.

Tentative Class Schedule

Week	Dates	Howell Reading Chapter (Section)	Topics	
1	March	24	Introduction	
		26	8 (1-6) sampling distributions, hypothesis testing (review)	
2	April	28	LAB SPSS overview, HW1-out	
		31	12 (1-5) z-test, standard error, <i>t</i> -test	
		2	8 (7) <i>t</i> -tests continued, errors in inference, <i>p</i> -values	
3		4	LAB HW1-in, HW2-out	
		7	14(1-4) independent samples <i>t</i> -test	
		9	14 (8) independent samples <i>t</i> -test, cont.	
4		11	LAB HW2-in, HW3-out	
		14	13 (1-4) dependent samples <i>t</i> -test	
		16	LAB dependent samples <i>t</i> -test, cont.	
5		18	LAB HW3-in, Exam Review	
		21	Exam 1	
		23	<i>F</i> -test	
6		25	LAB HW4-out	
		28	12 (7) confidence intervals (<i>z</i> , <i>t</i>)	
		30	8 (7), 15 power & effect size	
7	May	2	LAB HW4-in, HW5-out	
		5	LAB power & effect size continued	
		7	16 (1,2) introduction to ANOVA	
8		9	LAB HW5-in, Exam Review	
		12	Exam 2	
		14	16 (3,4) ANOVA calculations	
9		16	LAB HW6-out, ANOVA calculations cont.	
		19	16 (5,6) post hoc procedures	
		21	18 (1-5) repeated measures ANOVA	
10		23	LAB HW6-in, HW7-out	
		*** No Class 5/26 – Memorial Day Observed ***		
		28	9 (1-9), 10 (1-4) correlation and regression	
		30	LAB multiple regression, HW7-in, HW8-out	

Final Exam (Exam 3)

HW8-in

Tuesday, June 3rd

9:30-11:18am in Psychology Building (Room 010)

Psychology 320

Introduction to Data Analysis

Instructor: Trisha Van Zandt
Lazenby 230; 688-4081
Office hours: MT 9:00-10:00, or by appointment
E-mail: van-zandt.2@osu.edu

T.A.s: LaBarron Hill
Lazenby 337
Office hours: MW 12:30-1:30
E-mail: hill.871@osu.edu

Andrés Soriano
Lazenby 337
Office hours: Th 12:30-2:30
E-mail: soriano.9@osu.edu

Web site: This course will use Carmen. Electronic communications via Carmen use your OSU handle (e.g., "smith.9999@osu.edu"). Make sure you check your OSU email on a regular basis.

Text: Howell, D. C. (2004). *Fundamental Statistics for the Behavioral Sciences* (6th Edition). Belmont, CA: Brooks/Cole.

Students with disabilities: This syllabus is available in alternative formats upon request. In addition, if you may need an accommodation based on the impact of a disability, you should contact the instructor immediately. Students with special needs should contact the Office of Disability Services (ODS) at 292-3307 for certification if they have not already done so. Upon such certification, the ODS and the instructor will make every effort to accommodate special needs. However, to ensure that evaluation of student performance in the course is conducted in a manner that is fair to all students, special accommodations will not be granted in the absence of ODS certification.

Academic Misconduct: All students at the Ohio State University are bound by the Code of Student Conduct (see <http://studentaffairs.osu.edu/resource.csc.asp>). Suspected violations of the code in this class will be dealt with according to the procedures detailed in that code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct.

Grades

This course will use the following fixed grading scale:

A	A-	B+	B	B-	C+	C	C-	D+	D
93%	90%	87%	83%	80%	77%	73%	70%	67%	60%

There will be three exams, each worth 15% of your grade. We will have 3 short in-class quizzes, each worth 5% of your grade (for a total of 15%). Homeworks, which will be assigned on a weekly basis, will be worth 40% of your grade.

Important Dates		
	Date	Weight
Midterm 1	Friday, April 20	15%
Midterm 2	Friday, May 11	15%
Midterm 3	Friday, June 1	15%
Quiz 1	Wednesday, April 4	5%
Quiz 2	Monday, April 30	5%
Quiz 3	Monday, May 21	5%
Homework (best 6 of 9)		40%
		100%

Dr. Van Zandt reserves the right to modify the weights on exams, quizzes and homeworks as she sees appropriate. She also reserves the right to give unannounced or "pop" quizzes, either for extra credit or otherwise.

The Curve

To prevent against unfair exams, the grade of the second highest scorer on any exam will be 100%, and the cutoffs will be computed from that grade. So, for example, if Dr. Van Zandt writes a really hard test and the second highest score is 72%, and you earn 60%, your score on that exam will be $60/72 = 83\%$. She will also apply this curve to the final grades. (Note that she has never had to do this!)

Homework

Homeworks will be due on Monday at the beginning of recitation. Because solution sets will be posted online, no late homeworks will be accepted. There will be 9 homeworks assigned. Three of these are "optional," and you can make up missing homeworks by turning in one or more of these optional assignments. Please note: homeworks are worth 40% of your grade! Don't blow them off! If you do, even if you do perfectly on all exams and quizzes, the best grade you will be able to earn is a D.

Exams and Quizzes

Quizzes are closed book/closed notes, and will begin at the start of class time on the scheduled date. Each quiz will take no longer than 10 minutes. If you are late, you will miss the quiz. Makeup quizzes will not be provided to people who arrive late. *The quiz dates are Wednesday April 2, Monday April 28, and Monday May 19.*

Exams will be closed-book, but you may bring one 8.5"x11" page of notes to the exam. *The three exams will be on Friday April 18, Friday May 9, and Friday May 30.*

Please note carefully:

1. If, because of an emergency, you cannot take an exam or quiz at the scheduled time, you must contact Dr. Van Zandt **BEFORE** the test.
2. There will be **NO EXCEPTIONS** to (1.) above.
3. Dr. Van Zandt has voice mail (688-4081) so you can leave her a message if she is not at her desk.
4. You must provide **DOCUMENTATION** that verifies the emergency that prevented you from taking an exam or quiz at the scheduled time. No documentation, no makeup.

Tentative Class Schedule

Week	Dates	Howell	Williams	Topics	
<i>Descriptive Statistics</i>					
1	March	24	Ch 1,2(1,2)	Ch 1	
		26	Ch 3(1-3)	Ch 2(1-4)	
		28			Introduction, preliminary concepts Frequency distributions, percentiles Recitation
2	April	31	Ch 3(4-6)	Ch 2(3)	
		2*	Ch 4	Ch 3(1,2)	
		4			Graphic representations Central tendency Recitation
3		7	Ch 5(1-6)	Ch 3(3,4)	
		9	Ch 9(1-4)	Ch 3(5),11(1-3)	
		11			Variability, dispersion Covariance and correlation Recitation
4		14	Ch 9(6,7),10(1-5)	11(4)	
		16			Correlation and regression Examples, test review
		18			Exam 1 (Covers readings and lectures through Week 4)
<i>Inferential Statistics</i>					
5		21	Ch 7	Ch 4(1)	
		23	Ch 6(1,2)	Ch 3(6),4(2)	
		25			Probability The normal distribution Recitation
6	May	28*	Ch 8(2),12(1)	Ch 4(3)	
		30	Ch 6(3)	Ch 9(1,2, stop before 9.2.1)	
		2			Sampling distributions Confidence intervals Recitation
7		5	Ch 12(7)		
		7			Confidence intervals cont. Examples, test review
		9			Exam 2 (Covers readings and lectures from Weeks 5-7)
8		12	Ch 8(1-5)	Ch 5(1,2)	
		14	Ch 8(6-8)	Ch 5(3-6),7	
		16			Hypothesis testing The z-test Recitation
9		19*	12(3-7)	6,9(2.1)	
		21	14(1,3,4,6)	8(1,3,4)	
		23			The one-sample <i>t</i> -test Two-sample <i>t</i> -tests Recitation
10		26			
		28			Memorial Day Examples, test review
		30			Exam 3 (Covers readings and lectures from Weeks 8-10)

* - Quiz day