

**University of Florida
College of Public Health & Health Professions Syllabus**

**CLP 6529, Applied Multivariate Methods In Clinical Psychology (3 credit hours)
Section Number: 023C, Fall: 2016**

Meeting time/place: Wednesdays Periods 9-11 (4:05-7:05 pm, HPNP G-316)

Delivery Format: Blended learning/flipped classroom
Course Website or E-Learning: <http://lss.at.ufl.edu>

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Office Hours: By appointment
Teaching Assistants:
 TA1: Nikolette Lipsey (nlipsey@ufl.edu)
Preferred Course Communications: Email

Prerequisites Student must have successfully completed CLP 6528. All others must petition.

PURPOSE AND OUTCOME

Course Overview. This course examines the application of multivariate methods to the analyses of psychological data. The course will begin with a brief review of the matrix algebra concepts, the general linear model, and multiple regression. Major emphasis will be given to (1) the multivariate analysis of variance (MANOVA) and its extensions (ANCOVA, Repeated Measures Analysis of Variance), (2) hierarchical mixed effects models, and (3) factor analysis in its various forms (principal components, exploratory factor analysis, confirmatory factor analysis, structural equation modeling). Special topics may be covered throughout the course, if time and interest allow. As an applied course, emphasis will be less on formulae and their derivation, and more on the review of (1) major assumptions, (2) the conditions under which the analysis might be appropriate, (3) implementation of the analysis in major statistical packages (SPSS, AMOS), and (4) interpretation of analyses.

Relation to Program Outcomes. This course is required in Counseling Psychology, and can fulfill an "advanced statistics" requirement in Clinical and Health Psychology.

Course Objectives and/or Goals

Content domains: MANOVA and multivariate repeated measures of variance, discriminant function analysis, mixed effects/random effects modeling (hierarchical/between and longitudinal applications), principal components analysis and exploratory factor analysis, confirmatory factor analysis, structural equation modeling and mediated regression, multi-group CFAs

Dimension	Objective	Learning activity/ies	Evaluation
Knowledge	Read textbook and primary source meetings; class powerpoints and transcripts. Identify the major topics covered each week and the relationship to the course roadmap Reproduce simple analysis demonstrated in lecture	Online lectures, online demonstrations, readings	Self-testing and mastery learning; multiple-choice examination
Comprehension	Define the major concepts/terms each week Describe the appropriate situations in which to use techniques demonstrated Differentiate among different approaches (e.g., different kinds of analysis strategies) and their strengths and weaknesses	Online demonstrations , In-class discussion readings	Self-testing and mastery learning, in-class practice exercises, multiple-choice examination
Application	Calculate major coefficients and summary statistics Chart key findings and interpret Choose the best analysis for a given situation Extend basic analysis situations demonstrated in class to more complex data problems	Online demonstrations , Hands-on class sessions, Team-based problem solving,	Self-testing and mastery learning; in-class practice exercises, data analysis homework (output generation)
Analysis	Break down the multiple results of a data analysis into constituent pieces Interpret the results of analyses with regards to the substantive questions being asked Recommend next steps or areas in need of clarification to improve the analysis	Team-based problem solving, In-class discussion, coaching/mentoring	Peer-review and group self-evaluation, data analysis homework (analysis selection and output interpretation)
Synthesis	Collaborate with group members to determine the best	Coaching/mentoring, Team-based	Multiple choice examination

Dimension	Objective	Learning activity/ies	Evaluation
	solution to a complex problem Combine multiple sources of information (e.g., information regarding distributions and analytical question) Construct an appropriate analysis strategy for a multi-part data problem Model independent/dependent variable relationships using the appropriate techniques given distributions and questions	problem solving	(questions combining multiple aspects of the course); homework (multi-component data-analysis problems); personal data application exercises
Evaluation	Appraise the quality of the data and the admissibility of solutions generated Assess the fit/quality of the solution and recommend next steps Compare/contrast solutions generated under multiple approaches to transformation or data analysis Prioritize and select the best choice for data analysis, given available data and distribution and research question.	Coaching/mentoring, Team-based problem solving	Homework (data-analysis problems requiring you to judge effectiveness of the solution); group self-evaluation discussions; personal data application exercises

Instructional Methods

This is a blended learning course. Specifically, it uses a flipped classroom (lectures online, in person meetings for collaborative problem solving)

What is blended learning and why is it important? A Blended Learning class uses a mixture of technology and face-to-face instruction to help you maximize your learning. Knowledge content that I would have traditionally presented during a live class lecture is instead provided online before the live class takes place. This lets me focus my face-to-face teaching on course activities designed to help you strengthen higher order thinking skills such as critical thinking, problem solving, and collaboration. Competency in these skills is critical for today's health professional.

What is expected of me? You are expected to actively engage in the course throughout the semester. You must come to class prepared by completing all out-of-class assignments. This preparation gives you the knowledge or practice needed to engage in higher levels of learning during the live class sessions. If you are not prepared for the face-to-face sessions, you will struggle to keep pace with the activities occurring in the live sessions, and it is unlikely that you will reach the higher learning goals of the course. Similarly, you

are expected to actively participate in the live class. Your participation fosters a rich course experience for you and your peers that facilitates overall mastery of the course objectives.

Things to keep in mind. Because I post material on line, you can go back and review it as many times as needed to feel comfortable with the material prior to the live class. Please keep in mind that you have to allocate your time wisely to take full advantage of the blended learning approach.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

(note: Readings are sometimes on topics ahead of the current week, to help prepare you for later weeks)

Week	Class meeting	Date to complete online lecture by	Topic(s)	Readings: Required / Recommended	Assignment due date
0	8/24	n/a	Course introduction	None require	
1	8/31	8/31	Overview and multivariate methods	TF01 and TF02, MEY02; <i>TF03, TF04 and TF05 (for those uncertain about prerequisites)</i> , MEY03, AC01, GY01	
2	9/7	9/7	MANOVA	TF07; AF14, GY08, MEY09	9/13
3	9/14	9/14	MANOVA contrasts, post hocs, MANCOVA	None required; MEY10, MEY11, HAI06	9/20
4	9/21	9/21	MANOVA profile analysis, discriminant functions	TF08; MEY10, MEY11, HAI06	9/27
5	9/28	9/28	Discriminant functions, mixed effects models	TF09; MEY07, AC11	n/a
6	10/5	10/5	Mixed effects models: between school and longitudinal	TF15; HOX01, HOX02, HOX03, HOX04	10/11
7	10/12	10/12	Longitudinal mixed effects models	SINGER; LUKE01_02, KREF01, KREF02, KREF03, KREF04, KREF05,	10/18
8	10/19	10/19	Mixed effects models and dimension reduction	TF13; GY04, GOR01	10/25

Week	Class meeting	Date to complete online lecture by	Topic(s)	Readings: Required / Recommended	Assignment due date
9	10/26	10/26	Exploratory factor analysis	MEY12; GOR02, GOR08	11/1
10	11/2	11/2	Exploratory and confirmatory factor analysis	HAI03; GOR09	11/8
11	11/9	11/9	CFA using AMOS, introduction to SEM	MEY13; GY07, <i>AMOS Users Manual & Tutorial</i>	11/15
12	11/16	11/16	Missing data	TF14; GY08_2, HAI11	11/29
13	11/30	11/30	Structural equation modeling	MEY14; GY03	12/6
14	12/7	12/7	Advanced SEM, invariance, multi-group models	MEY15; <i>None recommended</i>	
			Final exam is Tues 12/13 from 12:30 pm to 2:30 pm, online in Canvas		

Caveat:

The above schedule and procedures in this course are subject to change in the event of extenuating circumstances. Any changes will be announced in class, and the student is personally responsible for obtaining updated information regarding those changes.

Course Materials and Technology

Reading materials:

Readings for this include traditional textbook/didactic readings, explaining the assumptions, computation, and practical interpretation of particular procedures. Some readings will be presented via the course textbook, and some will come from supplemental readings (to be provided at the course website).

Required text

(TF) Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th. Ed.). Boston, MA: Pearson. ISBN-10: 0205849571 ISBN-13: 9780205849574. An e-book version can be obtained:

http://www.coursesmart.com/IR/2448463/9780205249152?__hdv=6.8.

Recommended backgrounders/procedurals/extra reading

- (AC)** Afifi, A. A., & Clark, V. (1996). *Computer-aided multivariate analysis* (3rd Ed.). New York: Chapman and Hall.
- (AF)** Field, A. (2005). *Discovering statistics using SPSS* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- (GOR)** Gorsuch, R. L. (1983). *Factor analysis* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- (GY)** Grimm, L. G., & Yarnold, P. R. (Eds.). (1995). *Reading and understanding multivariate statistics*. Washington, DC: American Psychological Association.
- (GY_2)** Grimm, L. G., & Yarnold, P. R. (Eds.). (2000). *Reading and understanding more multivariate statistics*. Washington, DC: American Psychological Association.
- (HAI)** Hair, J. E., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (5th. Ed.). Upper Saddle River, NJ: Prentice Hall.
- (MEY)** Meyers, L. W., Gamst, G., & Guarino, A. J. (2006). *Applied Multivariate Research: Design and Interpretation*. Thousand Oaks, CA: Sage Publications.
- (HOX)** Hox, J. (2002). *Multilevel Analysis* Mahwah, NJ: Lawrence Erlbaum Associates.
- (KREF)** Kreft, I., & De Leeuw, J. (1998). *Introducing multilevel modeling*. Thousand Oaks, CA: Sage Publications.
- (LUKE)** Luke, D. A. (2004). *Multilevel Modeling*. Thousand Oaks, CA: Sage Publications.
- (SING)** Singer, J. D., & Willett, J.B. (2003). *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence*. London: Oxford University Press.

Software/computing resources:

The "official" software language of this course will be SPSS/AMOS (whatever the latest version supported by PPHP is). **All students must have access to the full-featured version of SPSS/AMOS, regardless of specific version number.** See note above. Students are **required** to bring tablets/computers to weekly class meetings, and they will be **required** to conduct SPSS/AMOS analyses in class.

- Students in PPHP will access SPSS via our terminal server (ts.pphp.ufl.edu). You will need a terminal services compatible remote desktop client. This is free in Windows. For iOS clients, the rdp app (not the free one) is the best. For Macs, Microsoft Remote Desktop App from the App Store
- Students not in PPHP will access SPSS (and **all** students will access AMOS via the <http://info.apps.ufl.edu/> website. (Please see that site for technical instructions; you will need to install a small Citrix client on your machine the first time you use it).

These are both virtual machines, which means you can run SPSS on any Windows, MAC, or even tablet (iOS, anyway) machine.

- In the event that you want your PERSONAL copy on your PERSONAL machine, you will want to buy the SPSS Graduate Pack PREMIUM Edition (no lower version will suffice). You can get a home-use copy at the UF HUB (you must appear PHYSICALLY to get a disk). This will be good until 12/31, and then you would need to obtain a new version for the next calendar year. See <http://helpdesk.ufl.edu/software-services/spss/> for details. (\$35 in 2016). You can also acquire AMOS there for an additional \$35.
- If you want to download a 12 month copy, you may purchase it from <http://onthehub.com> . Be sure to download the "Standard", not "Base" Grad Pack,

which costs \$60 for six months or \$95 for 12 months. You have to buy AMOS as a separate add-on.

(https://estore.onthehub.com/WebStore/OfferingsOfMajorVersionList.aspx?pmv=12c7bd0a-436e-e511-9411-b8ca3a5db7a1&cmi_mnuMain=2ff73789-74c7-e011-ae14-f04da23e67f6&cmi_mnuMain_child=2a1143f0-74c7-e011-ae14-f04da23e67f6&utm_source=SPSSstatistics-productpage-statistics&utm_medium=onthehub-productpage&utm_campaign=SPSS)

All students must also be able to access course materials, which will be distributed electronically as Microsoft PowerPoint, Microsoft Word (PHHP currently supports Office 2010), or Adobe Acrobat files. This software is available free to UF students via download (<http://www.it.ufl.edu/2015/01/free-office-365-downloads-available-to-faculty-and-staff/>) or via the <http://apps.ufl.edu> server. In the first class, all students will complete an e-mail register; students are responsible for updating the instructor on e-mail changes throughout the term. **All** class materials will be distributed by e-mail or Canvas site, so regular and frequent checking is a necessity.

For issues with technical difficulties for E-learning please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

ACADEMIC REQUIREMENTS AND GRADING

Quizzes (1% each)

Each week, there is a mastery quiz to submit . This consists of a few simple true/false, multiple choice, or short answer questions probing the content of that week's lecture and/or readings. These are online in Canvas, and must be submitted prior to each week's class (Wednesdays at 4:05 pm). Note: **YOU ARE LOCKED OUT OF ALL SUBSEQUENT CANVAS CONTENT UNLESS YOU PASS EACH QUIZ WITH AT LEAST 80% CORRECT. EVEN IF YOU ARE GOING TO MISS A CLASS, YOU MUST COMPLETE THE QUIZ EACH WEEK BEFORE THE DEADLINE. THERE ARE NO EXCEPTIONS OR EXTENSIONS; YOU HAVE AT LEAST SEVEN DAYS TO COMPLETE EACH QUIZ.**

In-class Assignments (1% each)

Each week, there is an *in-class collaborative assignment* to submit (all members of a team must submit the same assignment). This is graded for presence/absence. These must always be posted to Canvas by **7:05 pm of the day** in which they are due

*Note: There is a 2% credit for missed in class submissions. In other words, students can miss up to two in-class submissions without losing points. It is not possible to make up for missed submissions. **In order to qualify for these points, students must submit an "absence reporting form" which is linked on the Persistent Resources page, accessible from the Canvas home page for our course.***

Homework Assignments (5% each)

Most weeks, there is also an *independent homework* to submit (each student must submit their own assignment, and collaboration is not permitted; see the Appendix of this syllabus for collaboration rules on homework). These must always be posted to Canvas by **11:59 pm of the day** in which they are due (typically the Tuesday before each class meeting).

Examination (17%)

Multiple choice examination – This two-hour exam will be scheduled during the UF Exam period (details below). The exam will consist of 50 multiple choice questions; The exam will be administered via Canvas on Tues 12/13 from 12:30 pm to 2:30 pm EST in the “quizzes” tab. The exam will cover all content in lecture/readings from the semester. Students are strongly urged to keep up with the optional multiple-choice self-assessments, as these are close in content and format to the actual exam questions. The exam requires a good internet connection; on-campus possibilities will be discussed in class closer to the final exam date.

Grading

Requirement	Due date	% of final grade (must sum to 100%)
Lecture quiz	8/31	1%
In-class assignment	8/31	1%
Lecture quiz	9/7	1%
In-class assignment	9/7	1%
Homework	9/13	5%
Lecture quiz	9/14	1%
In-class assignment	9/14	1%
Homework	9/20	5%
Lecture quiz	9/21	1%
In-class assignment	9/21	1%
Homework	9/27	5%
Lecture quiz	9/28	1%
In-class assignment	9/28	1%
Lecture quiz	10/5	1%
In-class assignment	10/5	1%
Homework	10/11	5%
Lecture quiz	10/12	1%

Requirement	Due date	% of final grade (must sum to 100%)
In-class assignment	10/12	1%
Homework	10/18	5%
Lecture quiz	10/19	1%
In-class assignment	10/19	1%
Homework	10/25	5%
Lecture quiz	10/26	1%
In-class assignment	10/26	1%
Homework	11/1	5%
Lecture quiz	11/2	1%
In-class assignment	11/2	1%
Homework	11/8	5%
Lecture quiz	11/9	1%
In-class assignment	11/9	1%
Homework	11/15	5%
Lecture quiz	11/16	1%
In-class assignment	11/16	1%
Homework	11/29	5%
Lecture quiz	11/30	1%
In-class assignment	11/30	1%
Homework	12/6	5%
Lecture quiz	12/7	1%
In-class assignment	12/7	1%
Final Exam (Tues 12/13 from 12:30 pm to 2:30 pm, EST)	12/13	17%

Note: The number of assignments and exercises *is not set in stone*; we might have to add or remove an assignment, depending on class progress. If this occurs, the remaining assignments will be prorated so that they still, collectively, contribute 55% to your final grade. In addition, even if the assignments differ in the number of points that they are worth, each assignment will be weighted to contribute equally to your final grade. So, if we have 11 assignments, each one is worth 5% of the grade. If we end up having only 5 assignments, each one is worth 11% of grade. All assignments count for the exact same percentage of your grade, even if they are individually worth a different number of points.

When you submit your assignments to Canvas, it is essential that (a) you put your name in the “name” field of the homework, and (b) the first word of your assignment document title be your LAST NAME. After 2 reminders about this, a 2-point deduction will be made on each homework for which these naming conventions are forgotten. See below for additional policy on late submissions.

Assignments will consist of multiple items. Each and every item will have equal weight and will be graded according to the rubric below. (Note: partial points, e.g., 7.5, are permissible; TAs may also score out of range for specific reasons.)

0	not attempted
7	“mercy point” (e.g., you really don’t deserve a point, but because you made some attempt, this is acknowledged; example: doing a stepwise regression when the question asks for hierarchical); note: there must be SOME evidence of relevant effort; random text would earn a “0”
8	doing the correct analysis, but coming up with the wrong numbers (e.g., choosing the wrong DV or IV combination)
9	substantially correct, but either (a) missing one or more essential item (e.g., you conduct a regression and include the regression table, but fail to discuss or interpret it), or (b) you include too much information (e.g., you include tables/figures that are not needed for the answer, and you also fail to defend/explain why it is relevant). Teaching assistants will provide you with a list of missing elements upon grading
10	adequate/all required elements are present

In addition to reinforcing content learned in class, homework questions are designed to provide students with experience analyzing, presenting and discussing research methods and results for a scientific audience. Students are therefore encouraged to think carefully about the information needed to adequately address each question. The following guidelines are intended to facilitate this process:

- Each question will have defined length-of-response guidelines.
 - Do not exceed these guidelines—they are usually more generous than is needed to answer the question (there will be a grade penalty for alterations).
 - If you paste figures or tables, use the “Paste Special” feature to paste as a “**picture**” or “**bitmap**”, so that the output can fit within the space provided.
- Be judicious in your selection of output. Including output that is not relevant to the problem, or that is not discussed in your answer, will lead to a grading penalty being applied. Homeworks will not be scrutinized for compliance with APA format unless this is explicitly requested.
- Students who are confused about the meaning/phrasing of a question are welcome to ask for clarification on the class discussion in Canvas.

Point system used (i.e., how do course points translate into letter grades).

Points earned	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Please be aware that a C- is not an acceptable grade for graduate students. A grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:

<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Exam Policy. Exam will be online (Canvas), 12/15 from 5:30-7:30 pm EST, and will consist of 50 multiple choice items covering content from the semester.

Policy Related to Extra Credit

Occasionally, homework may include the opportunity for bonus points. These extra credit problems will be optional.

For student evaluations of teaching (<https://evaluations.ufl.edu>), all members of the class will be awarded one (1) bonus point if 80% of the enrolled class completes evaluations, and two (2) bonus points if 100% of the enrolled class completes evaluations.

Policy Related to Make up Exams or Other Work

Missed in-class assignments cannot be made up, but students can miss up to two in-class assignments without losing points. *It is not possible to make up for missed in-class submissions. In order to qualify for these points, students must submit an "absence reporting form" which is linked on the Persistent Resources page, accessible from the Canvas home page for our course.*

For homework, late submissions are not encouraged. Late submissions will be accepted for up to 7 days, but with the following penalty schedule:

With regard to missing or incomplete assignments, the following policies apply:

- Graders will **not** contact you about missing or incomplete assignments. **It is your responsibility** to check that the *correct* assignment has been submitted to e-learning on time.
- The late policy below applies **ONLY** to homework. In-class exercises (which are graded on a submitted/non-submitted basis) may **NOT** be turned in late, and will be assigned a grade of zero if missed.
- **It may be possible to avoid a late penalty IF YOU CONTACT THE INSTRUCTOR AT LEAST 24 HOURS IN ADVANCE.** You should email both Dr. Marsiske and your teaching assistant, and explain what issue (e.g., bereavement, illness) necessitates lateness. In some cases, documentation may be requested. If a lateness allowance is agreed to, this applies to a single assignment only. It does not allow you to delay future assignments. Note, conference attendance or doctoral qualifying

examinations or thesis/dissertation defenses do not constitute valid lateness excuses.

- If your assignment is late, you will lose 10% each day. Thus, if an assignment is worth 30 points, you will lose 3 points for each late day. “Late” begins one minute after the due time (e.g., an assignment due at 8:34 am is considered late at 8:35 am). Penalties are as follows:

1 minute to 24 hours late	10% of maximum deducted from achieved grade
1 day + 1 minute late to 48 hours late	20% of maximum deducted from achieved grade
2 days + 1 minute late to 72 hours late	30% of maximum deducted from achieved grade
3 days + 1 minute late to 96 hours late	40% of maximum deducted from achieved grade
4 days + 1 minute late to 120 hours late	50% of maximum deducted from achieved grade
5 days + 1 minute late to 144 hours late	60% of maximum deducted from achieved grade
6 days + 1 minute late to 168 hours late	70% of maximum deducted from achieved grade
7 days + 1 minute late or longer	100% of maximum deducted from achieved grade

NOTE: UPLOADING THE WRONG DOCUMENT IS SAME-AS-LATE, even if you have documentation that you completed the document on time. **It is your responsibility to verify that you have uploaded the correct document.** (You should open or download your uploaded homeworks and double- or triple-check that you have uploaded the right one).

- There will be **no** exceptions to this policy.
- If you have uploaded the wrong document, and e-learning does not allow you to correct this, you should IMMEDIATELY send the correct document to Dr. Marsiske and your teaching assistant via email.
- If you cannot upload a document due to technical problems (e.g., if e-learning is down), you may e-mail your assignment to Dr. Marsiske and your teaching assistant. The timestamp on your e-mail will serve as the time submitting. In such cases, please upload your assignment to e-learning as well, once the technical issue is resolved.

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Incomplete grades:

An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has 1) completed a major portion of the course with a passing grade, 2) been unable to complete course requirements prior to the end of the term because of extenuating circumstances, and 3) obtained agreement from the instructor and arranged for resolution (contract) of the incomplete grade. Instructors assign incomplete grades following consultation with Department Chairs.

Policy Related to Required Class Attendance

It is the expectation of the faculty in Clinical and Health Psychology, and Psychology, that all students attend all classes. Students are expected to be present for all classes, since much material will be covered only once in class. Weekly in-class meetings will generally

require in-class submissions of material...this can only be done in class, and during class time. Thus, physical attendance is required.

Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:

http://www.registrar.ufl.edu/catalogarchive/01-02-catalog/academic_regulations/academic_regulations_013_.htm

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Inclusive Learning Environment.

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

Expectations Regarding Course Behavior

As a matter of mutual courtesy, please let the instructor know when you're going to be late, when you're going to miss class, or if you need to leave early. Please try to do any of these as little as possible. Students who have extraordinary circumstances preventing attendance, or who must leave early, should explain these circumstances to the course instructor prior to the scheduled class, or as soon as possible thereafter. The instructor will then make an effort to accommodate reasonable requests. If you must miss a class, please request notes from your classmates about the exercises/discussion you missed.

Communication Guidelines

For extra help:

The instructional team will make every effort to support students in understanding course content and reading materials. The following resources are available for this purpose: Class Discussion. The class question-and-answer discussion board will occur in Canvas ("Discussion" link), and will be monitored by the entire instructional team. Unfortunately, due to the limitations of Canvas, questions can no longer be posted anonymously.

Note #1: You can receive notifications whenever the discussion board is updated. Simply go to “Discussions” and select “Watch” in the upper Discussion menu. In the “Watch” link, select “Notify me by email whenever a new message is posted”.

Note #2: We ask that you minimize sending questions **directly** to the TAs/instructor to ensure that

- (a) your classmates can share in the insights by reading the blog
- (b) the instructional staff does not end up answering the same question multiple times.
- (c) you benefit from the possibility of receiving responses from any of the three instructional members, rather than just the person you e-mailed.

For these reasons, emailed questions will be strongly discouraged, unless they relate to highly personal and idiosyncratic issues. Emailed questions may receive the response of “please post this on the blog so it can be answered”. If you are afraid that your question will give away the answer, please think about how to rephrase it so that it does not give away the answer. If this is not possible, then you may e-mail the instructional staff directly.

Office Hours and Appointments. The TA and Dr. Marsiske have office hours by appointment for extra help. Note, though, that these are not intended as a venue for, in essence, re-teaching the course. Instructional staff is more than willing to help, but students *must* first complete these steps before requesting additional assistance:

- Review the blog in case it provides clarification
- Re-examine the notes from class
- Listen to the accompanying audio.
- Read (or re-read) the readings from that week.
- Consider watching the associated video, and/or Andy Fields’ supplemental notes (<http://www.statisticshell.com/apf.html>, and then click the “Statistics Hell-P” link) at his website or at the Sage website <http://www.sagepub.com/field4e/main.htm>, you may need to complete a free registration

In reviewing the above resources, students are asked to write down specific questions about the material that is causing confusion. If you have, in good faith, put in the work to improve your understanding, then the instructional staff can build on all your preparatory work and really help you over the “humps”.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>
<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu> so make sure you include a statement regarding the value and expectation for student participation in course evaluations. We suggest you include a comment regarding how you will use the evaluations (e.g. to make specific improvements to the course and teaching style, assignments, etc.). It is also important to make some statement regarding the direct influence they have on faculty tenure and promotion, so your input is valuable. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class. The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.

- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:
- Alachua County Crisis Center:
(352) 264-6789
- <http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.asp>
X

BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Appendix: Acceptable Collaboration

On Collaboration

What constitutes acceptable levels of collaboration in this class? Please just treat this as "continuing education". It is here for your reference, but if (after reading this) you feel like you may have gone beyond acceptable and want to discuss it, please get in touch with me or one of the teaching assistants at your convenience.

The short answer about how much collaboration is acceptable is "As specified in the syllabus, and in the UF Honor Code". Let's review those items quickly, and then go a little deeper.

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1. UF Honor Code:

A key phrase in this honor code relates to "ambiguity": "It is the responsibility of the student to seek clarification on whether or not use of materials or collaboration or consultation with another person is authorized prior to engaging in any act of such use, collaboration or consultation. If a faculty member has authorized a student to use materials or to collaborate or consult with another person in limited circumstances, the student shall not exceed that authority. If the student wishes to use any materials or collaborate or consult with another person in circumstances to which the authority does not plainly extend, the student shall first ascertain with the faculty member whether the use of materials, collaboration or consultation is authorized. "

<http://regulations.ufl.edu/chapter4/4041-2008.pdf>

Key phrasing with regard to collaboration:

(a) Plagiarism. A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
2. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

(b) Unauthorized Use of Materials or Resources ("Cheating"). A student shall not use unauthorized materials or resources in an academic activity. Unauthorized materials or resources shall include:

1. Any paper or project authored by the student and presented by the student for the satisfaction of any academic requirement if the student previously submitted substantially the same paper or project to satisfy an academic requirement and did not receive express authorization to resubmit the paper or project.

2. Any materials or resources prepared by another student and used without the other student's express consent or without proper attribution to the other student.

3. Any materials or resources which the faculty member has notified the student or the class are prohibited.

4. Use of a cheat sheet when not authorized to do so or use of any other resources or materials during an examination, quiz, or other academic activity without the express permission of the faculty member, whether access to such resource or materials is through a cell phone, PDA, other electronic device, or any other means.

(c) Prohibited Collaboration or Consultation. A student shall not collaborate or consult with another person on any academic activity unless the student has the express authorization from the faculty member.

1. Prohibited collaboration or consultation shall include but is not limited to:

a. Collaborating when not authorized to do so on an examination, take-home test, writing project, assignment, or course work.

b. Collaborating or consulting in any other academic or co-curricular activity after receiving notice that such conduct is prohibited.

c. Looking at another student's examination or quiz during the time an examination or quiz is given. Communication by any means during that time, including but not limited to communication through text messaging, telephone, e-mail, other writing or verbally, is prohibited unless expressly authorized.

2. It is the responsibility of the student to seek clarification on whether or not use of materials or collaboration or consultation with another person is authorized prior to engaging in any act of such use, collaboration or consultation. If a faculty member has authorized a student to use materials or to collaborate or consult with another person in limited circumstances, the student shall not exceed that authority. If the student wishes to use any materials or collaborate or consult with another person in circumstances to which the authority does not plainly extend, the student shall first ascertain with the faculty member whether the use of materials, collaboration or consultation is authorized.

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2. Syllabus:

The syllabus says:

"On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment".

It is desirable and expected that take home assignments will stimulate conversation among classmates, and that classmates may actually mentor one another in the work. Students are also likely to discuss elements of the assignment with the instructor. It is expected that submitted work will solely reflect the student's own efforts. Students are expected not to collaborate in running analyses, writing answers, or interpreting results. The TAs and instructor will regularly check for "unusual congruence" in answers, and will discuss concerning instances with students involved. Where collaboration has been found, a zero grade will be assigned."

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3. So what does this mean:

Because acceptable levels of collaboration can get "gray" in data analysis courses, the examples that follow below try to set some limits on "acceptable" vs. "unacceptable" situations:

ACCEPTABLE: Student 1 says to Student 2: "I'm so confused...do I put the predictor in the "fixed", "random" or "covariates" box?" The collaborating student expresses his or her opinion

UNACCEPTABLE: Sitting down and doing the analysis together.

ACCEPTABLE: Student cannot make a syntax run, no matter what. Second student reviews the syntax, and maybe even goes so far as to say, "why don't we sit in front of a computer, and show me what you're doing?" Based on what the second student see, he/she may make suggestions regarding how to get the syntax to run...BUT NOT suggestions on what variables are selected, etc.

UNACCEPTABLE: Three students sit around a computer together, then save a common output, which each then uses to do the homework. Each person SHOULD have run the analysis independently. If the students need to sit around the computer with someone, it probably should have been with an instructor.

ACCEPTABLE: Running the analysis independently and writing it up independently.

UNACCEPTABLE: "Was the main effect of smoking significant for you? It WAS? It wasn't for me. I better rerun the analysis and figure out where I went wrong." Don't change your results based on what someone else got.

Now, these are just random examples. What the Honor Code says is that "when in doubt, ask first". This is consistent with HIPAA, FERPA, and many clinical activities.

If you find yourself drawn to excessive collaboration because what you REALLY need is more instructional support, please let the instructor/TA know.

Excessive collaboration triggers an official process (<http://www.dso.ufl.edu/sccr/faculty/>); to avoid it, please draw a clear firewall between YOUR work, and the work of other students in the class.