

University of Florida  
College of Public Health & Health Professions  
Department of Clinical and Health Psychology  
Course Syllabus

**CLP 7525, Best Methods for the Analysis of Psychological Change**

Spring 2014, Section # 18DB (3 credits)  
Wednesdays & Thursdays Periods 9-10 (4:05 – 5:35 pm), HPNP Rm G-110  
<http://lss.at.ufl.edu>

**Instructor Information**

**Instructor:**

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and by appointment

**Course Overview or Purpose**

The study of behavior change is a core unifying focus in the behavioral sciences. In Psychology, intervention focused areas (such as Clinical, Counseling, Organization, Educational, Sport) all have a common interest in detecting behavioral change due to treatments. In addition, Developmental and Social Psychology often have strong interests in understanding the natural course of change, and in understanding the antecedents and consequences of such change. Recently, following trends in econometrics and social science, micro-longitudinal/intensive longitudinal designs have become more important. This course provides an introduction to some of the specialized techniques that have evolved for the study of change (taxonomies of change, mixed effect growth models, latent growth models, growth pattern mixture models, and survival analysis).

This is an *advanced* class, with the presumption that all students have had at least three preparatory classes at the graduate level. Thus, this class will focus much more on the student's ability to extract critical information from course readings and lectures, and to apply their learning to data sets and problems of personal relevance.

### **Course objectives:**

1. Students will become familiar with several analytic approaches for the measurement and analysis of change
2. Students will select and appropriately apply these approaches to longitudinal data, and will write clear interpretations of their findings
3. Students will develop the ability to understand and criticize primary source articles using the methods discussed in class.

### **Course format**

The course will be conducted in the form of a graduate seminar. Class will meet Wednesdays and Thursdays from 4:05 pm – 5:35 pm. The class will consist primarily of discussions of the readings, with a working-through of analysis setup and output interpretation for the methods discussed. The assignments for the class (output generation, portfolio contributions) are the principal vehicles for making the content concrete. Students are expected to use their own problem solving skills to gain access to computers and software, to figure out how to invoke and use statistical software.

### **Prerequisites:**

Formal prerequisites are either (a) prior completion of CLP 6529 (Multivariate Methods) and, for non-CHP students, (b) registration permission from the Curriculum Committee of the Department of Clinical and Health Psychology. See Debora Haring, [dharing@phhp.ufl.edu](mailto:dharing@phhp.ufl.edu) for the appropriate forms and procedures. Details regarding petitioning can be found at the “Syllabi” link of <http://marsiskelab.phhp.ufl.edu>. Under certain circumstances, students with prior coursework/experience in structural equation modeling (especially with AMOS) and hierarchical linear modeling (especially with SPSS) may be granted waivers to the CLP 6529 requirement.

Students must have access to a recent version of SPSS (premium graduate pack or higher) and to a FULL-FEATURED and recent (not student) version of AMOS. Students should be comfortable with its use (i.e., have an understanding of how to load the program, read data files, enter and access data, run analyses and obtain printout). **See the computer resources section below for special notes on computer and software resources!**

### **Reading materials:**

Textbook/background readings for the course will be taken from the sources listed below. Each reading is followed by an acronym in parentheses; these acronyms appear further below in the syllabus. Additional primary source readings (which demonstrate use of methods or provide further detail) will be indicated under the topical outline.

Bollen, K. A. & Curran, P. J. (2006). Latent Curve Models: A Structural Equation Perspective. Hoboken, NJ: Wiley. (BOLL)

Collins, L. M., & Horn, J.L. (Eds). (1991). Best Methods for the Analysis of Change: Recent Advances, Unanswered Questions, Future Directions. Washington, DC: American Psychological Association. (COLHOR)

Collins, L. M., & Sayer, A.G. (Eds). (2001). New Methods for the Analysis of Change. Washington, DC: American Psychological Association. (COLSAY)

Duncan, T. E., Duncan, S. C., & Strycker, L. A. (2006). An Introduction to Latent Variable Growth Curve Modeling: Concepts, Issues, and Applications (Second Edition). Mahwah, NJ: Lawrence Erlbaum Associates. (DUN)

Fitzmaurice, G. M., Laird, N. M., & Ware, J. H. (2004). Applied Longitudinal Analysis. Hoboken, NJ: Wiley. (FITZ)

Singer, J. D., & Willett, J.B. (2003). Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence. London: Oxford University Press. (SING)

Walls, T.A., & Schafer, J. L. (2006). Models for Intensive Longitudinal Data. London: Oxford University Press. (WALLS)

**Course website:**

The class uses the UF Sakai portal for posting of supplemental readings, copies of overheads, audio files, self-assessment examinations. Log on at <http://lss.at.ufl.edu> and you should find the course link there. Course assignments and data sets will be posted there. The handouts will generally be made available on the Monday or Tuesday of the week in which the lectures will occur. An announcement will be sent to the class list when the handouts have been posted.

**Grading procedure and scales:**

Percentage grades in this class are earned on the basis of points (described below), which are then converted to letter grades and grade point equivalents (as shown in the chart below).

Percentage or points earned in class	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 equivalent	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://www.registrar.ufl.edu/staff/minusgrades.html>

On the course schedule below is listed the date on which each assignment is distributed to the class. Assignments are always due, in e-learning, immediately before class time on their due date; this is usually 4:04 pm.

There will be a cumulative Final Exam consisting of a 2-hour 50 multiple choice item examination.

The grade breakdown for this class is summarized below. **Note:** The number of output assignments 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 25% of 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 5 assignments, each is worth 5% of the grade. If we have 4 assignments, each one is worth 6.25%.

The grade for the class will be based on a number of evaluation components, as described below.

*Output generation/highlighting exercises* (25% of grade, 5% each) – You will be given a data set and asked to run analyses (covered in class/readings) on the dataset. You will be asked to paste the output (or at least relevant pieces of it) into Microsoft Word, and then use the Word “comment” tool to annotate/highlight important parts of the output. The main goal here is running the analysis and highlighting what is important, rather than writing up/summarizing.

**When you submit your exercises to Sakai, 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; instructor 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

Exercises are designed to reinforce procedures discussed in class.

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 blog.***

*Portfolio contributions: 2 Milestones* (50% of grade, 25% each). Two times in the semester, students are expected to contribute a five-to-ten page portfolio component (APA Style Results sections format, including tables and figures). The portfolio should apply the methods reviewed in the preceding seven weeks to either (a) data set(s) controlled by the student, or (b) alternative data sets made available by the instructor. Each portfolio contribution should take the following format:

- i. One paragraph background, with references
- ii. Bulleted list of specific aims (with hypotheses, if appropriate)
- iii. One paragraph summary of methods, including participants, measures, and design. This is a very brief summary, similar to a structured abstract
- iv. Results section, with tables and figures. This should address the specific aims
- v. One paragraph discussion, summarizing the meaning of the findings, major limitations, and appropriate next steps.

This assignment is completely open: The selection of research questions, data set, breadth and complexity are all completely at the discretion of the student. Grading of the portfolio contribution will be in the form of a scientific review, with scores assigned on the basis of the following review criteria: *ambition, clarity, comprehensiveness, accuracy, appropriateness of methods to the research question addressed.*

*Multiple choice examination* (25% of grade) – 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 e-learning on **Wednesday April 30 at 4-6 pm at the class Sakai portal (check the “Assessments” tab).**

**The exam is cumulative. Students are strongly urged to keep up with the multiple-choice self-assessments from this semester, 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.**

### **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.

### **For extra help:**

The instructor 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 Sakai (“Discussion” link), and will be monitored by the instructor. Unfortunately, due to the limitations of Sakai, 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 instructor to ensure that

- (a) your classmates can share in the insights by reading the blog
- (b) the instructor does not end up answering the same question multiple times.
- (c) your classmates actually have a chance to answer your questions as well

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.* Dr. Marsiske has designated office hours (see top of syllabus for details). Additional “extra help” appointments can be made as needed. Prior to scheduling an appointment, students should first complete these steps before requesting additional assistance:

- Review the discussion board 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.

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 we can build on all your preparatory work and really help you over the “humps”.

### **Software/computing resources:**

The "official" software languages of this course will be SPSS and AMOS.

- PPHP students can access SPSS, but not AMOS, through the terminal server (ts.php.ufl.edu)
- All other students can access SPSS and AMOS through the apps.ufl.edu server; PPHP students will also need to access AMOS there.
- The apps.ufl.edu service is a VERY useful resource, but it requires some procedural learning, especially how to access and save files. Please spend some time at the start of the semester learning to use this service.

Students are encouraged to bring their laptops to class, although distracted behavior (e.g., web-surfing during class) is strongly discouraged.

**University's Honesty Policy:** (cheating and use of copyrighted materials)

*Academic Integrity* – Students are expected to act in accordance with the University of Florida policy on academic integrity (see Student Conduct code, the Graduate Student Handbook, or this web site for more details:

[www.dso.ufl.edu/judicial/procedures/academicguide.php](http://www.dso.ufl.edu/judicial/procedures/academicguide.php)).

**Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.**

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

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. **For further clarification, please see the “Acceptable Collaboration” appendix to this syllabus! Rules will be strictly enforced.**

**Copyright policy** - The University of Florida policy on copyright states: "Copyright permission should not be required of instructors in the following circumstances:

- 1) A single copy of an article, chapter, or poem is on reserve for only *one semester*.
- 2) A reasonable number of copies of an article, chapter, or poem are placed on reserve for only *one semester*. "Reasonable" is determined by an assessment of the number of students assigned the reading, the difficulty of the reading, and the time frame allowed for completion of the reading. This should normally not exceed 6 copies, although up to one copy for every 15 students may be accepted if space is available in the reserve area and the above criteria are met."

Article and material distribution for this class will be discussed in the first class meeting.

### **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. Attendance will not be formally measured or graded, but this expectation should guide student 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. 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. Attendance will not be checked or graded, but you are responsible for the content of all classes, including issues raised in the spontaneous class discussions. If you must miss a class, please request notes from your classmates.

### **Make-up Exams or Other Work**

*Extra credit* - No planned opportunities for extra credit exist in this course.

*General policy on missed work* - It is expected that no students will miss any assignments or in-class tests/exams. **No make-ups will be possible.**

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
- **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 4:04 pm is considered late at 4:05 pm). 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 144 hours late	60% of maximum deducted from achieved grade
6 days + 1 minute late 168 hours late	70% of maximum deducted from achieved grade
7 days + 1 minute late 192 hours late	80% of maximum deducted from achieved grade
8 days + 1 minute late 216 hours	90% of maximum deducted from achieved grade
9 days + 1 minute late or later	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.

### **Accommodations for Students with Disabilities**

If you require classroom accomodation because of a disability, you must first register with the Dean of Students Office (<http://oss.ufl.edu/>). 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 may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575, or Student Mental Health Services, 352-392-1171. Visit their web sites for more information: <http://www.counsel.ufl.edu/> or <http://www.health.ufl.edu/shcc/smhs/index.htm#urgent>

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, including primary care, women's health care, immunizations, mental health care, and pharmacy 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: [www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc)

Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789.

*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.*

**Topical Outline**

<b>Week</b>	1
<b>Date</b>	January 8-9
<b>Topic</b>	How should we measure change, or should we? Classifying change (reliable change, standard error of measurement)
<b>Primary Reading</b>	SING01 FITZ02
<b>Secondary Readings</b>	Cronbach, L. J., & Furby, L. (1970). How should we measure "change" -- or should we? <i>Psychological Bulletin</i> , 74, 68-80. Nesselroade, J. R., & Cable, D. G. (1974). "Sometimes it's okay to factor difference scores"--The separation of state and trait anxiety. <i>Multivariate Behavior Research</i> , 9, 272-283. Baltes, P. B., Nesselroade, J. R., Schaie, K. W., & Labouvie, E. W. (1972). On the dilemma of regression effects in examining ability-level-related differentials in ontogenetic patterns of intelligence. <i>Developmental Psychology</i> , 6, 78-84. Dudek, F. J. (1979). The continuing misinterpretation of the standard error of measurement. <i>Psychological Bulletin</i> , 86, 335-337.

<b>Applied Reading</b>	Saczynski, J. S., Willis, S. L., & Schaie, K. W. (2002). Strategy use in reasoning training with older adults. <u><i>Aging Neuropsychology and Cognition</i></u> , 9, 48-60. Temkin, N. R., Heaton, R. K., Grant, I., & Dikmen, S. S. (1999). Detecting significant change in neuropsychological test performance: A comparison of four models. <u><i>Journal of the International Neuropsychological Society</i></u> , 5, 357–369.
<b>Assignments</b>	n/a

<b>Week</b>	2
<b>Date</b>	January 15-16
<b>Topic</b>	Trajectory concepts and the multilevel model for change I
<b>Primary Reading</b>	BOLL01 SING03
<b>Secondary Readings</b>	COLSAY02 COHOR06
<b>Applied Reading</b>	Kristjansson, S.D., Kircher, J. C., & Webb, A. K. (2007). Multilevel models for repeated measures research designs in psychophysiology: An introduction to growth curve modeling <u><i>Psychophysiology</i></u> , 44, 728–736.
<b>Assignments</b>	n/a

<b>Week</b>	3
<b>Date</b>	January 22-23
<b>Topic</b>	Multilevel model for change II (Conditional/unconditional models, unstructured data, missingness)
<b>Primary Reading</b>	SING04 SING05
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	Cillessen, A. H. N., & Borch, C. (2006). Developmental trajectories of adolescent popularity: A growth curve modelling analysis. <u><i>Journal of Adolescence</i></u> , 29, 935-959.
<b>Assignments</b>	n/a

<b>Week</b>	4
<b>Date</b>	January 29-30
<b>Topic</b>	Multilevel model for change III (More time varying covariates, error structures, centering, non-linear change)
<b>Primary Reading</b>	SING06
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	n/a
<b>Assignments</b>	Output generation assignment #1 due

<b>Week</b>	5
<b>Date</b>	February 5-6
<b>Topic</b>	Wrap-up of MLM for change; Latent curve models I (Intro to latent curves)
<b>Primary Reading</b>	SING08 <i>DUN01</i> <i>DUN02</i>
<b>Secondary Readings</b>	COLSAY03
<b>Applied Reading</b>	Cattaneo, L. B., Stuewig, J., Goodman, L. A., Kaltman, S., & Dutton, M. A. (2007). Longitudinal helpseeking patterns among victims of intimate partner violence: The relationship between legal and extralegal services. <i>American Journal of Orthopsychiatry</i> , <i>77</i> , 467-477.
<b>Assignments</b>	n/a

<b>Week</b>	6
<b>Date</b>	February 12-13
<b>Topic</b>	No class (INS conference)
<b>Primary Reading</b>	n/a
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	n/a
<b>Assignments</b>	Output generation assignment #2 due

<b>Week</b>	7
<b>Date</b>	February 19-20
<b>Topic</b>	Latent curve models II (Unconditional models; unequal time trend; periodicity)
<b>Primary Reading</b>	<i>DUN03</i> <i>BOLL02</i>
<b>Secondary Readings</b>	COLSAY04
<b>Applied Reading</b>	n/a
<b>Assignments</b>	Portfolio #1 due

<b>Week</b>	8
<b>Date</b>	February 26-27
<b>Topic</b>	Latent curve models III (Periodicity, non-linear time basis, conditional models)
<b>Primary Reading</b>	BOLL03 BOLL04
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	Ram, N. & Grimm, K. (2007). Using simple and complex growth models to articulate developmental change: Matching theory to method. <i>International Journal of Behavioral Development</i> , <i>31</i> ,

	303-316.
<b>Assignmnts</b>	n/a

<b>Week</b>	9
<b>Date</b>	March 12-13
<b>Topic</b>	Latent curve models IV (Conditional models, auto-regressive models)
<b>Primary Reading</b>	BOLL05
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	Lenzenweger, M. F.& Willett, J. B. (2007). Predicting individual change in personality disorder features by simultaneous individual change in personality dimensions linked to neurobehavioral systems: The longitudinal study of personality disorders, <i>Journal of Abnormal Psychology</i> , 116, 684-700.
<b>Assignments</b>	Output generation assignment #3 due

<b>Week</b>	10
<b>Date</b>	March 19-20
<b>Topic</b>	Latent curve models VI (Higher order models)
<b>Primary Reading</b>	DUN04 BOLL07
<b>Secondary Readings</b>	COLSAY06
<b>Applied Reading</b>	Gottfried, A. E., Marcoulides, G. A, Gottfried, A. W., Oliver, P. H., & Guerin, D. W. (2007). Multivariate latent change modeling of developmental decline in academic intrinsic math motivation and achievement: Childhood through adolescence. <i>International Journal of Behavioral Development</i> , 31, 317-327. Christensen, H., Mackinnon, A., Jorm, A. F., Korten, A., Jacomb, P., Hofer, S. M., & Henderson, S. (2004). The Canberra longitudinal study: Design, aims, methodology, outcomes and recent empirical investigations. <i>Aging, Neuropsychology, and Cognition</i> , 11, 169-195.
<b>Assignments</b>	n/a

<b>Week</b>	11
<b>Date</b>	March 26-27
<b>Topic</b>	Latent curve models VII (Added growth and mixture models)
<b>Primary Reading</b>	DUN05 DUN06 DUN08
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	
<b>Assignments</b>	n/a

<b>Week</b>	12
<b>Date</b>	April 2-3
<b>Topic</b>	Latent curve models VIII (Cohort sequential designs; planned missingness)
<b>Primary Reading</b>	DUN11
<b>Secondary Readings</b>	COLSAY11 COLSAY12
<b>Applied Reading</b>	Duncan, S. C., Duncan, T. E., Strycker, L. A., & Chaumeton, N. R. (2007). A Cohort-Sequential Latent Growth Model of Physical Activity From Ages 12 to 17 Years. <u>Annals of Behavioral Medicine</u> , 33, 80-89. Morgan-Lopez, A. A. & Fals-Stewart, W. (2007). Analytic methods for modeling longitudinal data from rolling therapy groups with membership turnover, <u>Journal of Consulting and Clinical Psychology</u> , 75, 580-593. Graham, J. W., Taylor, B. J., Olchowski, A. E., & Cumsille, P. E. (2006). Planned Missing Data Designs in Psychological Research. <u>Psychological Methods</u> , 11, 323-343.
<b>Assignments</b>	Output generation assignment #4 due

<b>Week</b>	13
<b>Date</b>	April 9-10
<b>Topic</b>	Intensive Longitudinal Designs
<b>Primary Reading</b>	WALLS11 WALLS01 Tabachnick, B. G., & Fidell, L. S. (2007). <u>Using Multivariate Statistics</u> (Fifth Edition, Chapter 18, Time Series, pp. 18.1-18.63).
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	McCrae, C. S., McNamara, J. P. H., Rowe, M. A., Dzierzewski, J. M., Dirk, J., Marsiske, M., & Craggs, J. G. (in press). Sleep and affect in older adults: Using multilevel modeling to examine daily associations. <u>Journal of Sleep Research</u> . Salthouse, T. A., Nesselroade, J. R., Berish, D. E. (2006). Short-term variability in cognitive performance and the calibration of longitudinal change. <u>Journal of Gerontology: Psychological Sciences</u> , 61B, P144-P151
<b>Assignments</b>	n/a

<b>Week</b>	14
<b>Date</b>	April 16-17
<b>Topic</b>	Event occurrence/Discrete-Time Hazard Models I
<b>Primary Reading</b>	SING09 SING10 SING11
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	Edelen, M. O., Tucker, J. S., & Ellickson, P. L. (2007). A discrete time hazards model of smoking initiation among West Coast youth from age 5 to 23. <u>Preventive Medicine: An International Journal Devoted to Practice and Theory</u> , 44, 52-54.
<b>Assignments</b>	Portfolio #2 due

<b>Week</b>	15
<b>Date</b>	April 23
<b>Topic</b>	Discrete-Time Hazard Models II/Continuous Time Event Models I
<b>Primary Reading</b>	SING12 SING13
<b>Secondary Readings</b>	n/a
<b>Applied Reading</b>	McHugh, M. D. (2007). Readiness for change and short-term outcomes of female adolescents in residential treatment for anorexia nervosa. <u>International Journal of Eating Disorders</u> . 40, 602-612.
<b>Assignments</b>	Output generation assignment #5 due

<b>Week</b>	16
<b>Date</b>	April 30 (4-6 pm)
<b>Assignments</b>	Final examination (multiple choice, via Sakai)

**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.

**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 sees, 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.

These are just examples. When in doubt, please ask first. If you are tempted to engage in excessive collaboration when what is really needed is additional instructional support, please ask your instructional team for assistance. A helpful UF website that may provide further guidance on these issues is shown below.

<http://www.dso.ufl.edu/sccr/faculty/>