

# Spring 2006

## STATISTICS 581: Statistical Consulting Practicum

**Course Instructors:**

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**Class Meetings** – Attend one class per week.  
 Choose the day you will attend from the following:

207 Thomas Bldg.	Monday	3:35-5:30 pm
007 Life Science Bldg.	Tuesday	1:00-2:15 pm
207 Thomas Bldg.	Wednesday	3:35-5:30 pm

*(Note: no classes on Tuesday before 2/14/2006)*

**Statistical Consulting Center Consultants:**      **RA:**    Junjia Zhu    [jxz203@psu.edu](mailto:jxz203@psu.edu)

<b>Office hours:</b>	Boomer	M (1:30-3:30)	&	Th (4:00-6:00)
	Mousavi	T (2:30-4:30)	&	Th (1:30-3:30)
	Shumway	W (9:00-11:00)	&	F (9:00-11:00)
	Zhu	M (1:00-3:00)	&	W (12:00-2:00)

**Readings Available:**    Electronic reserve  
                                       JStor  
                                       323A Thomas Building (SCC Library)

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### COURSE POLICIES

**Class attendance:** Required. The practicum is organized around principles of active and collaborative learning. Attendance and participation in class is an integral part of the course. There is no practical way of making up absences. Missed classes will impact your grade.

#### Requirements for working with clients:

- Exhibit professional behavior.
- Follow all steps of Activity Log.
- Be on time for all scheduled client meetings.
- Meet regularly with SCC instructors and consultants.
- Maintain a client file as specified in the handbook. In particular, a final client folder must have (1) final report, (2) draft report, (3) peer-reviewed report with completed form, (4) client request form with five key words, (5) completed Activity Log, (6) completed Information about Short-Term consulting, (7) legible labeled and dated meeting and research notes, (8) first and second meeting summaries, and process summary, (9) copies of any correspondence, (9) information provided by the client, if applicable, and any other materials which would enable us to understand the consulting process.

Paper clip (or binder clip) together, in separate packets, the reports, SCC forms, correspondence, client materials, etc. Clips are available at the Operations Desk.

- All client-related electronic materials must be stored in your SCC directory (\\Quasar\stat580).
- Provide a written recommendation for the client *in a timely fashion*. The norm for this is 14 business days, (or 2 ½ weeks), after the first meeting for the Fall and Spring semesters (seven business days in the Summer semester). Draft reports are due 9 business days after your first meeting. Any code or data used to develop the recommendation must be clearly labeled and in your SCC subdirectory at this time.
- Turn in the client file as soon as you have delivered the recommendation to the client, no more than 24 hours after the second meeting.
- Get approval from one of the course instructors for any extended work with the client such as additional hours spent on developing a recommendation, additional follow-up meetings, or data analysis.

**Criteria for assessment:** Stat581 (1 credit)                      20% class work, 80% consulting

You will receive grades on written assignments and draft and final versions of your client files. Client files will be graded on Process, Communication Skills, and Technical Accuracy:

- “Process”
  - o Following Activity log and course guidelines (e.g., completeness of file) and displaying responsible behavior
- “Communication”
  - o Quality of written work, including demonstration of a solid understanding of the client’s question, absence of spelling and grammatical errors, and clear presentation of statistical concepts in non-jargon terms

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- “Technical Accuracy”
  - o Appropriateness of methods proposed given the client’s statistical background and data

Non-MAS students are required to complete a minimum of three client files this semester (Stat 581). MAS students will complete a minimum of two client files and a comprehensive MAS project.

Class attendance and participation is required and you will be asked to present a minimum of one client file per 580/581 sequence to the class. MAS students must present one client file in Stat580 and the MAS comprehensive project in Stat581. Each presentation will last 30 minutes, and the sign up form is included in the schedule presented in this syllabus; a master copy will be posted at the SCC.

Course grades will be assigned based on client file grades and overall professionalism (e.g. class attendance and participation, maintaining files on the SCC server, mid-semester meeting with instructor, etc). Students who receive all “excellent” or 4/4 grades will earn an “A” in the course. Grades of “Very Good” or 3.6/4 may result in a final grade of A-. “Good” (3.2/4) equals B+, 2.8 is B and 2 earns B-. “Fair” (1.5/4) results in C+ and 1.0 is a C. If difficulties are not corrected after one conference with me an “F” grade will result and no additional clients will be assigned.

**Individual Conferences:** You are required to meet with a course instructor mid-way through the semester; it is your responsibility to schedule such a meeting by signing up to meet with one of us during office hours. Please, be sure to indicate that it is an individual conference on the sign up sheet. You should do so after completing your first client this semester but before beginning to work with your final client. Failure to do so will negatively impact your final grade.

**MAS Comprehensive Project:** To fulfill a degree requirement, each MAS student will complete a comprehensive project, which usually is an extension of one short-term client while in Stat581. In each short-term report, advice is provided to the client. In the comprehensive project, you will implement the advice you proposed in the associated short-term report and analyze the client’s data. The MAS project is due six weeks (three weeks in the summer term) after the associated short-term file is turned in. A grade for Stat581 cannot be assigned until the MAS project has been accepted by a course instructor and the MAS degree coordinator.

The project consists of data analysis, a written consulting report, and an oral presentation to the class. To avoid having two oral presentations in Stat581, MAS students will present one short-term client file in Stat580, satisfying the course requirement, and will present the MAS project in Stat581.

**Use of SCC computers and accounts:** As a student in STAT580, you will be assigned a subdirectory in your name on the SCC network (Q: drive). This account can be accessed from the PCs in Room 424. In addition, you may use SCC computers in 323 Thomas to work on client related activities while an Operations Assistant is on duty (usually Monday through Friday, 8:00 a.m. to 4:30 p.m.). All client-related electronic material must be saved in your Q: drive subdirectory in a logical and organized fashion.

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## PENN STATE POLICIES

All Penn State policies regarding ethics and honorable behavior apply to this course. Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. All University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For any material or ideas obtained from other sources, such as the text or things you see on the web, in the library, etc., a source reference must be given. Direct quotes from any source must be identified as such. Plagiarism will be reported to the Department Head and any instances of academic dishonesty WILL be pursued under the University and Eberly College of Science regulations concerning academic integrity.

You must provide copies of materials used to write your recommendation report in the client file along with your notes on that material. This includes web pages, pages from books, and lecture notes from previous classes.

Occurrence	Response
First	Final semester grade drops by ½ a letter grade (e.g. A- from A); -1/2 pt for process on current project
Second	Maximum semester grade is C ; -1 pt for process on current project
Third	F grade assigned as semester grade; notification sent to Department Head and academic advisor

## ASSIGNMENTS

ASSIGNMENT		
Due Date	Reading	Topic
Within 14 bus. days of first meeting		Client recommendation file (3-4 each semester) (draft 9 days, final 14 days)
Within two days of receiving draft file	Classmate's STAT580 draft Client file	Peer Review
Jan-Apr		Methodology Presentation – 1 in 580 or in 581

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**SCHEDULE: SPRING 2006 SEMESTER** (subject to change)

Monday	Tuesday	Wednesday
<b>1/9 – Class #1:</b> <b>Review syllabus and course requirements</b> <b>Lecture: Blocking</b>	<b>1/10 – No Classes</b>	<b>1/11 – Class #2:</b> <b>Lecture: Proc Summary</b> <i>(30 minutes)</i> 581 Presentation: <b>Sirius Fuller</b>
<b>1/16 – Martin Luther King Day – No Classes</b>	<b>1/17 – No Classes</b>	<b>1/18 – Class #3:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Lanyu Mi</b>
<b>1/23 – Class #4:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation: <b>Veronica Bressler</b>	<b>1/24 – No Classes</b>	<b>1/25 – Class #5:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation:
<b>1/30 – Class #6:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation:	<b>1/31 – No Classes</b>	<b>2/1 – Class #7:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Tatiana Benaglia (pseudo replication)</b>
<b>2/6 – Class #8</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Ruth Hummel</b>	<b>2/7 – No Classes</b>	<b>2/8 – Class #9:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Michael Zhang</b>
<b>2/13 – Class #10:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Christian Stopp</b>	<b>2/14 – Class #11:</b> <b>Lecture: Proc Mixed</b>	<b>2/15 – Class #12:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Juyoun Lee</b>
<b>2/20 – Class #13:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> <i>Remember to sign up for Individual Conferences</i> 581 Presentation: <b>Bee Hiriote</b>	<b>2/21 – Class #14:</b> <b>Lecture:</b> <i>Remember to sign up for Individual Conferences</i>	<b>2/22 – Class #15:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> <i>Remember to sign up for Individual Conferences</i> 581 Presentation: <b>Min Kyung Kim</b>
<b>2/27 – Class #16:</b> <b>Individual Conferences this week</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Jeff Skinner</b>	<b>2/28 – Class #17:</b> <b>Individual Conferences this week</b> <b>Lecture:</b> <i>(30 minutes)</i> 581 Presentation: <b>Shirvonne McCarthy</b>	<b>3/1 – Class #18:</b> <b>Individual Conferences this week</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Wei Zhang</b>

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Monday	Tuesday	Wednesday
<b>3/6 – Spring Break</b> No Classes	<b>3/7 – Spring Break</b> No Classes	<b>3/8 – Spring Break</b> No Classes
<b>3/13 – Class #19:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation: <b>Yan Zhu</b>	<b>3/14 – Class #20:</b> <b>Lecture:</b> <i>(30 minutes)</i> 581 Presentation: <b>Tracey Wrobel</b>	<b>3/15 – Class #21:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Yuexiao Dong</b>
<b>3/20 – Class #22:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Trent Gaugler</b>	<b>3/21 – Class #23:</b> <b>Lecture:</b> <i>(30 minutes)</i> 581 Presentation: <b>Li Wang</b>	<b>3/22 – Class #24:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Mian Huang</b>
<b>3/27 – Class # 25:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Bo Kai</b>	<b>3/28 – Class #26:</b> <b>Lecture:</b> <i>(30 minutes)</i> 581 Presentation: <b>Rong Liu</b>	<b>3/29 – Class #27:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation:
<b>4/3 – Class #28:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 580 Presentation:	<b>4/4 – Class #29:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation:	<b>4/5 – Class #30:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 581 Presentation: <b>Junwu Shen</b>
<b>4/10 – Class #31:</b> <i>Last week to assign new clients</i> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 580 Presentation:	<b>4/11 – Class #32:</b> 580 Presentation:  580 Presentation:	<b>4/12 – Class #33:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation: <b>Clara Jeon</b>
<b>4/17 – Class #34:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> MAS Presentation: <b>Sarah Lozo</b>	<b>4/18 – Class #35:</b> 580 Presentation:  581 Presentation: <b>Tatiana Benaglia</b>	<b>4/19 – Class #36:</b> <b>Discuss on-going projects</b> <i>(30 minutes)</i> 580 Presentation:
<b>4/24 – Class #37:</b> 580 Presentation:  580 Presentation:	<b>4/25 – Class #38:</b> 580 Presentation:  580 Presentation:	<b>4/26 – Class #39:</b> <b>All Client Files due</b>