I. LOCATOR INFORMATION:

Instructor: Hideki Morooka, Ph.D.
Course Number and Name: SOCI 505-01 Applied Multivariate Statistics
Semester Credit Hours: 3
Day and Time Class Meets: Monday, 6 pm - 8:50 am
Meeting Room: Helen T. Chick Building, Room 216-B
Office Location: Taylor Social Science Building, Room 210-E
Office Phone: 910-672-2402
E-mail (Preferred means of communication): hmrorooka@uncfsu.edu
Office Hours: Monday, 1:15 pm - 6 pm; Tuesday, 9:15 am -10:15 am; Thursday, 9:15 am - 11:30 am; or by appointment

II. COURSE DESCRIPTION:

An introduction to parametric, nonparametric and multivariate statistical techniques for the analysis of social research data and applications of such statistical techniques and sociological problems.

Prerequisites: SOCI 503. Also, a certain level of proficiency in computer operation (SPSS, Citrix, Blackboard, and MS Office) is assumed.

III. DISABLED STUDENT SERVICES:

In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act of 1990, if you have a disability or think you have a disability, please contact the Center for Personal Development in the Spaulding Building, Room 155; 910-672-1203. Also, please notify me of your eligibility as soon as possible so that we can discuss reasonable accommodations for you.

FSU Policy on Electronic Mail:

Fayetteville State University provides to each student, free of charge, an electronic mail account (username@broncos.uncfsu.edu) that is easily accessible via the Internet. The university has established FSU email as the primary mode of correspondence between university officials and enrolled students. Inquiries and requests from students pertaining to academic records, grades, bills, financial aid, and other matters of a confidential nature must be submitted via FSU email. Inquiries or requests from personal email accounts (e.g., Road Runner, Gmail, Hotmail, AOL, Yahoo, and etc.) are not assured a response. The university maintains open-use computer laboratories throughout the campus that can be used to access electronic mail.

Students are responsible for reading their e-mail on a regular basis to remain aware of important class and university information.

Rules and regulations governing the use of FSU email may be found at http://www.uncfsu.edu/PDFs/EmailPolicyFinal.pdf
IV. TEXTBOOKS:


V. STUDENT LEARNING OUTCOMES:

Student Learning Outcomes
Upon successful completion of this course, students will…

- be able to write clear, logical, analytic, and well-organized reports and papers.
- be able to differentiate among different methods of social research.
- be able to apply statistical knowledge to research analyses.
- be able to utilize statistical software such as SPSS to analyze data.
- be able to interpret statistical output in SPSS and provide logical explanations for statistical patterns.

VI. COURSE REQUIREMENTS AND EVALUATION CRITERIA:

GRADING
Your final course grade will be determined based on the following weighted percentages:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>35%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
</tr>
<tr>
<td>Research Proposal Presentation</td>
<td>20%</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>5%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>5%</td>
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</tbody>
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Final letter grades will be based on total points accumulated during the course. Letter grades will be determined in the following way:

FSU Grading Scale
A = 90% - 100%  B = 80% - 89%  C = 70% - 79%  F = 69% and below

Note that the cumulative percentage will be rounded to the nearest integer by using the symmetric arithmetic rounding. For example, if your final grade is 89.5%, it will be rounded up to 90%; then, you will receive an A. On the other hand, if you have 89.4%, it will be rounded down to 89%; then, you will receive a B.

Please remember that the instructor does NOT guarantee a passing grade to ANYONE!!

ATTENDANCE REQUIREMENTS:

Regular attendance is expected. The class roll will be taken and recorded throughout the term. If you miss lectures, it is entirely your own responsibility to get notes and other missed material from a classmate and catch up with the rest of the class, even if you have an excused absence.
**GRADED ASSIGNMENTS:**

**EXAMINATIONS**
There will be two (2) exams (a midterm and a final) given throughout the course. Both exams test your theoretical and applied knowledge of basic statistical analysis. You are expected to take both exams at the time that the exam is scheduled. The midterm exam will be given on Monday, February 25. The *midterm exam date is scheduled tentatively and subject to change.* The final exam will be given on Monday, April 29. The final exam will be cumulative; however, its main focus is on class material covered between the midterm exam and last day of lectures.

**RESEARCH PROPOSAL PRESENTATION**
You are required to give oral presentation to class. Detail will be discussed in class.

**HOMEWORK ASSIGNMENTS**
Homework assignments will be given intermittently throughout the course. A homework assignment must be turned in to the instructor at the beginning of class on the due date. If you fail to comply with this rule by late arrival at class (for example), your homework assignment will be considered a late submission.

**CLASS PARTICIPATION**
My definition of “class participation” is that you demonstrate continuous efforts and enthusiasm for this course, which includes the following: attending every single lecture; being punctual to class and remaining till dismissed; submitting assignments on due dates; actively participating in class discussion; asking good questions; responding to questions being asked; showing improvement in class performance (if applicable); behaving appropriately to the instructor and the classmates with respect; and so on. It is imperative that you demonstrate these elements described above consistently throughout the semester in order to receive the full credit (5% toward your final course grade) for class participation. **DO NOT expect that everyone will receive full participation points automatically.** You need to work for it.

**POLICY ON LATE ASSIGNMENTS AND MISSED EXAMS:**

**LATE HOMEWORK ASSIGNMENTS**
Late assignments are accepted only if submitted to the instructor at the beginning of the next class meeting of the original due date (unless otherwise specified) and are subject to 20% penalty from the points earned.

**MISSED EXAMS**
No make-up exams will be given except for some documented cases. If you have a justifiable reason to miss an exam, please notify me of the situation at least 24 hours in advance. Then, we can discuss an arrangement to be made. If you have to miss taking an exam in case of emergency, please contact me within 24 hours after the scheduled exam time. **You must present appropriate official documentation for legitimate absence in writing to take a make-up exam.** If you fail to comply with this policy, the score of zero will automatically be recorded for that exam.

**CLASS POLICIES:**

- It is imperative that you keep up with class reading and assignments. Because of the cumulative nature of the course content, it will be very difficult to catch up if you fall behind. Please do not hesitate to ask for help. I will try to accommodate you as much as I can. However, you must demonstrate an initiative to seek help from me, and **DO NOT WAIT TILL LAST MINUTE** to contact me for help.
- **IMPORTANT:** Students are expected to maintain the highest standards of honesty in their college work. Cheating, forgery, and plagiarism are serious offenses. Students found guilty of any form
of academic dishonesty are subject to disciplinary action according to the FSU Code of Student Conduct.

- Always remember to be courteous to your classmates and instructor when you contact them!
Noncompliance with the FSU Policy on Disruptive Behavior in the Classroom could negatively affect your class participation points, or you would be asked to withdraw from the course.

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**FSU Policy on Disruptive Behavior in the Classroom**

The *Code of the University of North Carolina* (of which FSU is a constituent institution) and the *FSU Code of Student Conduct* affirm that all students have the right to receive instruction without interference from other students who disrupt classes.

FSU Core Curriculum Learning Outcome under Ethics and Civic Engagement (6.03): All students will “prepare themselves for responsible citizenship by fulfilling roles and responsibilities associated with membership in various organizations.” Each classroom is a mini-community. Students learn and demonstrate responsible citizenship by abiding by the rules of classroom behavior and respecting the rights all members of the class.

The FSU Policy on Disruptive Behavior (see FSU website for complete policy) identifies the following behaviors as disruptive:

1. Failure to respect the rights of other students to express their viewpoints by behaviors such as repeatedly interrupting others while they speak, using profanity and/or disrespectful names or labels for others, ridiculing others for their viewpoints, and other similar behaviors;
2. Excessive talking to other students while the faculty member or other students are presenting information or expressing their viewpoints.
3. Use of cell phones and other electronic devices
4. Overt inattentiveness (sleeping, reading newspapers)
5. Eating in class (except as permitted by the faculty member)
6. Threats or statements that jeopardize the safety of the student and others
7. Failure to follow reasonable requests of faculty members
8. Entering class late or leaving class early on regular basis
9. Others as specified by the instructor.

The instructor may take the following actions in response to disruptive behavior. Students should recognize that refusing to comply with reasonable requests from the faculty member is another incidence of disruptive behavior.

1. Direct student to cease disruptive behavior.
2. Direct student to change seating locations.
3. Require student to have individual conference with faculty member. At this meeting the faculty member will explain the consequences of continued disruptive behavior.
4. Dismiss class for the remainder of the period. (Must be reported to department chair.)
5. Lower the student’s final exam by a maximum of one-letter grade.
6. File a complaint with the Dean of Students for more severe disciplinary action.

Students who believe the faculty member has unfairly applied the policy to them may make an appeal with the faculty member’s department chair.
TECHNICAL SUPPORT:

If you encounter technical difficulties on Blackboard, Citrix, and etc., do not contact me. Please direct your issues to ITTS. ITTS technical support is available 24/7.
- Call 910-672-2085 on campus
- Call toll free 855-877-5811 from off campus
- Chat: https://chat.perceptis.com/c/uncfsu
- E-mail: uncfsuhelpdesk@perceptis.com

VII. COURSE ORGANIZATION:

I. Review of Basic Concepts (Warner, Ch. 1; LFF, Selected chapters)

II. Bivariate Pearson Correlation (Warner, Ch. 7; LFF, Ch. 10)

III. Bivariate Regression (Warner, Ch. 9; LFF, Ch. 11)

IV. Multiple Regression with Two Predictor Variables (Warner, Ch. 11; LFF, Ch. 11)

V. Dummy Predictor Variables and Interaction Terms in Multiple Regression
   (Warner, Ch. 12; LFF, Ch. 11)

VI. Preliminary Data Screening and Additional Techniques to Handle Violation of Assumptions
   (Warner, Ch. 4)

VII. Multiple Regression with More Than Two Predictors (Warner, Ch. 14)

VIII. Binary Logistic Regression (Warner, Ch. 21; LFF, Ch. 11)

* LFF denotes Levin, Fox, and Forde.