# University of North Texas at Dallas
## Spring 2015
### SYLLABUS

<table>
<thead>
<tr>
<th>Course Abbreviation/Number/Title/Semester Hrs</th>
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<tbody>
<tr>
<td>SOCI 3280D: Quantitative Research Methods</td>
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<table>
<thead>
<tr>
<th>Department of</th>
<th>Criminal Justice</th>
<th>Division of</th>
<th>Business &amp; Public Leadership</th>
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</thead>
<tbody>
<tr>
<td>Instructor Name:</td>
<td>Dr. Aaron Bartula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Location:</td>
<td>DAL 2 #320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Phone:</td>
<td>972-780-3629</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Address:</td>
<td><a href="mailto:Aaron.Bartula@untdallas.edu">Aaron.Bartula@untdallas.edu</a></td>
<td></td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Office Hours:</th>
<th>M 1pm-6pm; T 1pm-6pm; W 9am-12pm</th>
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<tbody>
<tr>
<td>Virtual Office Hours:</td>
<td>Anytime via email, usually will respond within 24 hours</td>
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<table>
<thead>
<tr>
<th>Classroom Location:</th>
<th>Online</th>
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<tbody>
<tr>
<td>Class Meeting Days &amp; Times:</td>
<td>N/A</td>
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| Course Catalog Description: | This course prepares students in the application of quantitative research methodology and statistical analysis in sociology and other social science disciplines. Examples using real research data will be provided to facilitate understanding and application of various quantitative and qualitative processes. |

<table>
<thead>
<tr>
<th>Prerequisites:</th>
<th>SOCI 3220 Qualitative Data Collection</th>
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<tbody>
<tr>
<td>Co-requisites:</td>
<td>None required, although an understanding of college algebra is essential</td>
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| Recommended Text and References: | This is an intensive course. Students in this class are highly encouraged to acquire a calculator with basic algebraic functions. |

| Access to Learning Resources: | UNT Dallas Library:  
phone: (972) 780-3625;  
web: [http://www.unt.edu/unt-dallas/library.htm](http://www.unt.edu/unt-dallas/library.htm)  
UNT Dallas Bookstore:  
phone: (972) 780-3652;  
e-mail: 1012mgr@fheg.follett.com |

| Course Goals or Overview: | The goal of this course is to introduce quantitative analysis techniques and how they are applied in social science research. |

| Learning Objectives/Outcomes: | At the end of this course, the student will  
1 Be able to explain and differentiate the concepts of sample and population.  
2 Understand and apply concepts of probability.  
3 Formulate hypotheses that require the use of quantitative research methodology.  
4 Identify the appropriate quantitative tools based on the research question.  
5 Demonstrate the ability to apply statistical models to real world research questions.  
6 Demonstrate the ability to compute and interpret statistical data in context.  
7 Demonstrate the ability to connect statistical findings to population and draw inference. |
# Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the instructor via Blackboard and email.

<table>
<thead>
<tr>
<th>TIMELINE</th>
<th>MODULES, TOPICS, and READINGS</th>
<th>Assignments Due Dates</th>
</tr>
</thead>
</table>
| Week 1: 1/20/2015 – 1/25/2015 | **MODULE 1:** Syllabus, Why We Use Statistics  
**Readings:** pgs. 1-25  
**Problems:** pgs. 25-29 | Pre-Quiz: NO LATER than 1/22/2015 by 5pm  
Discussion: NO LATER than 1/23/2015  
Opening Quiz: NO LATER than 1/25/2015 by 5pm |
| Week 2: 1/26/2015 – 2/1/2015 | Organizing the Data  
**Readings:** pgs. 33-72  
**Problems:** pgs. 72-79 | Pre-Quiz: NO LATER than 1/28/2015 by 5pm  
Discussion: NO LATER than 1/30/2015  
End of Chapter Quiz 1: NO LATER than 2/1/2015 by 5pm |
| Week 3: 2/2/2015 – 2/8/2015 | Measures of Central Tendency  
**Readings:** pgs. 81-96  
**Problems:** pgs. 96-101 | Pre-Quiz: NO LATER than 2/4/2015 by 5pm  
Discussion: NO LATER than 2/6/2015  
End of Chapter Quiz 2: NO LATER than 2/8/2015 by 5pm |
| Week 4: 2/9/2015 – 2/15/2015 | Measures of Variability  
**Readings:** pgs. 104-125  
**Problems:** pgs. 125-130 | Pre-Quiz: NO LATER than 2/11/2015 by 5pm  
Discussion: NO LATER than 2/13/2015  
End of Chapter Quiz 3: NO LATER than 2/15/2015 by 5pm |
| Week 5: 2/16/2015 – 2/22/2015 | **EXAM 1** | EXAM 1 NO LATER than 2/22/2015 by 5pm |
| Week 6: 2/23/2015 – 3/1/2015 | **MODULE 2:** Probability and the Normal Curve  
**Readings:** pgs. 135-164  
**Problems:** pgs. 165-171 | Pre-Quiz: NO LATER than 2/25/2015 by 5pm  
Discussion: NO LATER than 2/27/2015  
End of Chapter Quiz 4: NO LATER than 3/1/2015 by 5pm |
| 3/2/2015 | Last Day to W Drop | |
| Week 7: 3/2/2015 – 3/8/2015 | Samples and Populations  
**Readings:** pgs. 173-209  
**Problems:** pgs. 209-213 | Pre-Quiz: NO LATER than 3/4/2015 by 5pm  
Discussion: NO LATER than 3/6/2015  
End of Chapter Quiz 5: NO LATER than 3/8/2015 by 5pm |
**Readings:** pgs. 217-262  
**Problems:** pgs. 262-274 | Pre-Quiz: NO LATER than 3/11/2015 by 5pm  
Discussion: NO LATER than 3/13/2015  
End of Chapter Quiz 6: NO LATER than |
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Readings</th>
<th>Problems</th>
<th>Quiz Notes</th>
</tr>
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</table>
| 9    | 3/23/2015–3/29/2015 | Analysis of Variance (ANOVA)  | **Readings:** pgs. 276-308  
**Problems:** pgs. 308-316 |          | Pre-Quiz: NO LATER than 3/25/2015 by 5pm  
Discussion: NO LATER than 3/27/2015  
End of Chapter Quiz 7: NO LATER than 3/29/2015 by 5pm |
| 10   | 3/30/2015–4/5/2015 | EXAM 2                                  |                  |          | EXAM 2 NO LATER than 4/5/2015 by 5pm          |
| 11   | 4/6/2015–4/12/2015 | MODULE 3: Non-Parametric Tests of Significance | **Readings:** pgs. 319-349  
**Problems:** pgs. 349-360 |          | Pre-Quiz: NO LATER than 4/8/2015 by 5pm  
Discussion: NO LATER than 4/10/2015  
End of Chapter Quiz 8: NO LATER than 4/12/2015 by 5pm |
| 12   | 4/13/2015–4/19/2015 | Correlation                             | **Readings:** pgs. 365-389  
**Problems:** pgs. 389-398 |          | Pre-Quiz: NO LATER than 4/15/2015 by 5pm  
Discussion: NO LATER than 4/17/2015  
End of Chapter Quiz 9: NO LATER than 4/19/2015 by 5pm |
| 13   | 4/20/2015–4/26/2015 | Regression Analysis                     | **Readings:** pgs. 400-434  
**Problems:** pgs. 434-441 |          | Pre-Quiz: NO LATER than 4/22/2015 by 5pm  
Discussion: NO LATER than 4/24/2015  
End of Chapter Quiz 10: NO LATER than 4/26/2015 by 5pm |
**Problems:** pgs. 464-473 |          | Pre-Quiz: NO LATER than 4/29/2015 by 5pm  
Discussion: NO LATER than 5/1/2015  
End of Chapter Quiz 11: NO LATER than 5/3/2015 by 5pm |
| Finals Week | 5/4/2015–5/7/2015 | FINAL EXAM (3)                          |                  |          | FINAL EXAM NO LATER than 5/7/2015 by 5pm      |
**Course Evaluation Methods**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – written tests administered via Blackboard designed to measure knowledge and application of presented course module material.

**Pre-quiz** - written quizzes administered via Blackboard designed to measure knowledge and application of the week's presented material and to adequately prepare the student for the end of chapter quiz.

**End of Chapter Quizzes** – written quizzes administered via Blackboard designed to measure knowledge and application of the week's presented material.

**Class Discussions** – weekly participation in class discussion forums.

### Grading Matrix:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Value (points)</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Exams</td>
<td>3 exams at 100 points each</td>
<td>300</td>
</tr>
<tr>
<td>End of Chapter Quizzes</td>
<td>11</td>
<td>330</td>
</tr>
<tr>
<td>Class Discussions</td>
<td>12 discussions at 10 points each</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>750</strong></td>
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**Grade Determination:**
- **A** = 750 – 675 pts; i.e. 90% or better
- **B** = 674 – 600 pts; i.e. 80 – 89 %
- **C** = 599 – 525 pts; i.e. 70 – 79 %
- **D** = 524 – 450 pts; i.e. 60 – 69 %
- **F** = 449 pts or below; i.e. less than 60%

*No discussion about grades/points will be done through the internet or with anyone other than the student (FERPA law). Please make an appointment and I will happily discuss them or other concerns.*

**University Policies and Procedures**

**Students with Disabilities (ADA Compliance):**

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

**Student Evaluation of Teaching Effectiveness Policy:**

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.
Assignment Policy:

Exams - Three exams will be given over the course of the semester via Blackboard. Each exam will consist of a combination of multiple choice questions and calculations. Each exam will be open on the scheduled Monday at 8am and close on the following Sunday at 5pm. In other words, each exam must be completed NO LATER than 5pm on the scheduled Sunday due date!!! There are no time limits for the exams.

Pre Quiz – Each non-Exam week, a pre-quiz will be given in order to prepare the student adequately for the end of the chapter quiz. NOTE: The pre-quizzes are not for a grade, HOWEVER, the student MUST complete the pre-quiz each week prior to the end of chapter quiz becoming available. Specifically, each student must complete the pre-quiz and score a 100% completion each week prior to opening the end of week chapter quiz. Each pre-quiz will consist of 10 questions. You have as many attempts as necessary to complete a 100%. Thus, if you do not do well the first time, you may try and try again!!! Each pre-quiz will open on Tuesday each week. There are no time limits for the pre-quizzes.

End of Chapter Quizzes – Each non-Exam week, an end of the chapter quiz will be given via Blackboard. Each quiz will consist of multiple choice questions and calculations. You will only have one attempt at each end of the chapter quiz. The questions will be given one at a time and you will be allowed to revisit previous questions. End of the chapter quizzes will only open upon successful completion of the week’s pre-quiz. Each end of chapter quiz must be completed NO LATER than 5pm on the scheduled Sunday due date!!! There are no time limits for the end of chapter quizzes.

Class Discussions – Weekly class discussion forums will make up part of the final grade. In order to receive the full credit, each student is required to be PREPARED (having read the required readings –text, lecture slides) and attempted problems at the end of each chapter, prior to participating in the weekly forum discussions. Note the problems at the end of each chapter are not for a grade, they are intended to prepare each student to succeed in the discussion forums, end of chapter quizzes, and exams. In order to succeed in this class you must continually practice; more simply complete practice problems each week to prepare yourself!!! Using the assigned reading material as a foundation, each student is to:

1) Answer the week’s thread question as it applies to the course material (worth 5 points per week).
2) Respond to another student’s posting related to the course material (worth 5 points per week).
   a. Must identify which thread post you are responding to!!
   b. Confirm or contradict an assertion made from a classmates post and explain why.

   NOTE: Each thread post must be 5 or more sentences.

If the student is prepared and participates with both responses each week in the discussion forum, adhering to the above guidelines, they will receive full credit, if they are not prepared and participate they will receive partial credit, and/or if they do not complete both responses per week, lastly, if they do not participate they will receive no credit.

All class announcements will be posted on Blackboard, and/or sent via email. It is your responsibility to check Blackboard and your e-mail early and often. Ignorance to any posted announcement will not be an excuse.

Exam and Quiz Policy:
Exams should be taken as scheduled. Each QUIZ and EXAM must be completed in Blackboard NO LATER than 5pm on the scheduled date. No late or makeup quizzes or examinations will be allowed except for documented emergencies (See Student Handbook). It is your responsibility to contact me during the first two weeks of class if there’s anything about which I should know concerning special accommodation for any of the assignments. I will try to work out a suitable arrangement, but I must know about it during the first two weeks of class. It is also your responsibility to bring me the required documentation(s) or have the responsible parties contact me in a timely manner for any kind of special accommodation for any of the assignments.
Academic Integrity:
Academic integrity is a hallmark of higher education. You are expected to abide by the University’s code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University’s policies and procedures. Refer to the Student Code of Academic Integrity at [http://www.unt.edu/unt-dallas/policies/Chapter%207%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf](http://www.unt.edu/unt-dallas/policies/Chapter%207%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf) for complete provisions of this code.

Bad Weather Policy:
On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website [www.untdallas.edu](http://www.untdallas.edu). Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. Further, in order to receive credit for class discussion the student must be present in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. It is the student’s responsibility to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:
Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses, will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate. This course is designed to be a safe open forum so that we may critically analyze and discuss crime theories. Thus, please adhere to the guidelines outlined in the Code of Student Conduct.

Optional Policies:
- **Use of WebCT/Blackboard:** All material will be primarily distributed in the Blackboard section for this course.
- **Grade of Incomplete, “I”:** Though not encouraged, incomplete grades will be granted on a case by case basis. Each student seeking such grade must come speak to me as soon as it is being considered.