INFO 3236 Syllabus

**Business Analytics – INFO 3236**

**Fall 2012**

**August 21 – December 5**

**Instructor:** Dr. Monica Johar  
**Phone:** 704-687-7658  
**Email:** msjohar@uncc.edu (preferred)  
**Website:** Moodle (Access via 49er Express)

**Teaching Assistant:** TBD  
**Email:** TBD  
**TA Office Hours:** TBD

**Course:** INFO 3236

**Class Hours:** Tuesday/Thursday 12:30 am-1:45 pm  
**Venue:** Room 123, Friday Building

**Office Hours:** Tuesday 2:00-3:00 pm or by appointment  
**Room:** 352C, Friday Building, UNCC

**Course Materials**  
**Text Book:** *Seven Methods for Transforming Corporate Data Into Business Intelligence* by Vasant Dhar and Roger Stein.  
Available from **Gray’s bookstore** as a course-pack.

**Additional Readings**

- **Handouts, power-point slides, and Assignment Help documents will be posted on Moodle.** You can print the posted material and bring them to class. Please note that I will not provide printed copies of any of the posted materials in the class.

**Course Objectives:**

Business analytics is an emerging discipline of how to effectively deploy technology, organizational practices, and processes to increase an organization's return on its knowledge capital.

As we transition from an industrial to knowledge economy, an organization's ability to create and successfully leverage data and knowledge assets will be an important competitive factor.

Data management includes an understanding of issues relating to modeling, using, securing, and sharing the organizational data resources. This course will focus specifically on the understanding of data mining (including rule-based systems, decision trees etc) and other knowledge management concepts.

Business intelligence (BI) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions. BI applications include the activities of decision support systems, query and reporting, online analytical processing (OLAP), statistical analysis, forecasting, and data mining.  
(SearchCRM.com)
This course will examine business analytics from the organizational, technological, and management perspectives.

**Software:** SAS Software

**Schedule:**

**Tentative course schedule**

This is a tentative schedule and is subject to change. Please refer to Moodle for the most up-to-date information.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assigned reading</th>
<th>Homework due</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>21-Aug Introduction</td>
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<td></td>
<td>23-Aug Information Systems and Article (The Data Deluge)</td>
<td>Chapter-1</td>
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<td>Week 2</td>
<td>27-Aug Intelligence Density</td>
<td>Chapter-2</td>
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<td>29-Aug Decision Tables</td>
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<td>Week 3</td>
<td>4-Sep Data Warehousing</td>
<td>Chapter-4</td>
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<td>6-Sep Data Warehousing</td>
<td>Chapter-4</td>
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<td>Week 4</td>
<td>11-Sep Data Warehousing</td>
<td>Chapter-4</td>
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<td>13-Sep SAS Lab - Enterprise Guide</td>
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<td>Week 5</td>
<td>18-Sep Data Warehousing</td>
<td>Chapter-5</td>
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<td>20-Sep Rule Based Systems</td>
<td>Chapter-7</td>
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<td>Week 6</td>
<td>25-Sep Rule Based Systems</td>
<td>Chapter-7</td>
<td><strong>SAS Assignment 1 (Enterprise Guide) Due</strong></td>
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<td>27-Sep Rule Based Systems</td>
<td>Chapter-7</td>
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<td>Week 7</td>
<td>2-Oct Rule Based Systems</td>
<td>Chapter-7</td>
<td>Data warehousing Homework Due</td>
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<td>4-Oct EXAM!</td>
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<td>Week 8</td>
<td>9-Oct No class! 😊</td>
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<td>Week 9</td>
<td>11-Oct</td>
<td>SAS Demo: Association Rule Mining</td>
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<td>16-Oct</td>
<td>Neural Networks</td>
<td>Chapter-6</td>
<td><strong>Rule Based Systems Homework Due</strong></td>
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<td>18-Oct</td>
<td>Genetic Algorithms</td>
<td>Chapter-5</td>
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<tr>
<td>Week 10</td>
<td>23-Oct</td>
<td>Genetic Algorithms</td>
<td>Chapter-5</td>
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<td>25-Oct</td>
<td>Decision Trees</td>
<td>Chapter-10</td>
<td><strong>SAS Assignment 2 (Association Rule Mining) Due</strong></td>
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<td>Week 11</td>
<td>30-Oct</td>
<td><strong>EXAM 2</strong></td>
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<td>1-Nov</td>
<td>Decision Trees</td>
<td>Chapter-10</td>
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<td>Week 12</td>
<td>6-Nov</td>
<td>Decision Trees</td>
<td>Chapter-10</td>
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<td>8-Nov</td>
<td>Decision Trees</td>
<td>Chapter-10</td>
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<td>Week 13</td>
<td>13-Nov</td>
<td>SAS Demo: Decision Trees</td>
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<td>15-Nov</td>
<td>LOGIT-1</td>
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<td>Week 14</td>
<td>20-Nov</td>
<td>LOGIT-2</td>
<td><strong>Decision Trees Homework Due</strong></td>
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<td>22-Nov</td>
<td>No class! ☺ Thanksgiving Break</td>
<td><strong>SAS Assignment 3 (Decision Trees) Due</strong></td>
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<td>Week 15</td>
<td>27-Nov</td>
<td>Exam Review</td>
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<td>29-Nov</td>
<td><strong>EXAM 3</strong></td>
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<td>Week 16</td>
<td>4-Dec</td>
<td>SAS Lab</td>
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<td>Week 17</td>
<td>13-Dec</td>
<td>Optional Final Comprehensive Exam</td>
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**Grading:** We are planning to use Moodle to help with the course and grading

- Exams: 65%
- SAS Assignments: 15%
- Assignments: 15%
To compute your final letter grade use the following scale:

\[ \begin{array}{c c c c c}
\text{A} & \geq & 90.0\% & \text{B} & \geq & 80.0\% & \text{C} & \geq & 70.0\% & \text{D} & \geq & 60.0\% & \text{F} & < & 60.0\%
\end{array} \]

Grades will be posted on Moodle after each exam or assignment is graded. Access to your grades will be through Moodle. The grade distribution and scale are subject to change. Depending upon how the entire class performs in each exam I will curve the grades if required.

Assignments:

**SAS Application Assignments**
Assignments will involve the use of SAS. Assignments must be submitted through Moodle; submission of electronic copies by e-mail or on disk is not acceptable. Your NAME and ID should appear on the top of each page that you submit. All assignments should be completed on time and submitted on Moodle before the submission deadline as shown on Moodle. Assignments submitted after the deadline will be considered late. A penalty of **20% of the assignment value per day** (including weekends) is assessed on late assignments beginning on the day due.

**Other Written Assignments**
These assignments will be submitted on Moodle on the due date. All assignments should be completed on time and submitted on Moodle before the submission deadline as shown on Moodle. Assignments submitted after the deadline will be considered late. A penalty of **20% of the assignment value per day** (including weekends) is assessed on late assignments beginning on the day due.

All changes in assignments or schedules will be posted on Moodle. It is your responsibility to keep up with the changes that are posted on Moodle.

Questions on Exams:
Questions on the Exams will be taken from the assigned readings of texts, class lectures and assignments. If the answer to a Exam question is disputed, the student should submit a written appeal, citing the source (text page) to the instructor. The instructor will take these appeals into account during grading. If you know in advance that you will miss an exam, contact the instructor and make arrangements for a possible make-up exam.

Missed Exams
If an Exam is missed, a **COMPREHENSIVE** Exam covering all material for the course will be given on Dec 13th and will count for any missed exam. Whether you miss one exam or two exams you will need to take the comprehensive final covering the entire text in order to compensate for the missed exam/s.

Internet Warning:
There is material on the Internet that you may find objectionable. Most of this material has disclaimers. Believe them and stay away so that you will not be offended.

Working Together:
You may work together when learning how to use computers and applications. Moodle has a message board and you are encouraged to use the bulletin board for clarification or questions that can be answered by the instructor or other students. Each student, however, is expected to do the
assignments on their own. **Copying the computer files of some other student amounts to scholastic dishonesty** (see below) and will be subject to disciplinary actions that could result in a failing grade or expulsion from the University.

**Attendance**

Regular attendance is necessary for doing well in this course. You are expected to attend punctually all scheduled sessions and are responsible for completing the work from all of the class meetings. Attendance will be taken at random during the semester and will be counted towards class participation points. You are responsible for any material covered, announcements made, assignments passed out, and any other type of work you may miss during any absence from class. The exams may contain material that is not in the slides or handouts but was covered in the class.

**Tardiness or early departure is disruptive and is, of course, strongly discouraged.**

**Class behavior**

Inappropriate behavior in class distracts from the ability of others to profit from their in-class experience. Such inappropriate behavior includes arriving late, leaving early, talking, surfing the net during the class, and so on. Rude and inappropriate behavior will not be tolerated. Since it is my responsibility to provide an environment that is conducive to learning for everyone in the class, I will deduct points from the grade of any student who chooses to repeatedly distract others. In particularly egregious cases, I will have the student permanently removed from the class.

Under no circumstances will students be permitted to spend their class time working on assignments for other classes, checking e-mail, surfing the Web, or printing out homework. Attempts to engage in such behavior will be reflected in lower grades and may lead to removal from the course.

**Electronic Devices in Class**

Use of cellular phones, pagers, CD players, ipods, and similar devices are prohibited in the classroom and laboratory facilities. Cellular phones MUST BE TURNED OFF DURING CLASS and students are strongly discouraged from checking their cell-phone messages when the class in progress. Pagers must be set to vibrate, rather than beep. Use of instant messaging, email or other communication technologies during class time is prohibited. You may use a laptop to take notes during the class, but this should be done without distracting other students and without distracting you from the topic of discussion. Calculators and computers are prohibited during examinations and quizzes, unless specifically allowed by the instructor. **I will take very seriously any complaints from fellow students who are distracted by non-class related use of electronic devices by any student.**

Students violating these policies will be marked for disruptive behavior and may be asked to leave the class. Their grade will also be affected according to the rules of class participation points (pages 2 and 3 of this document).

**Accommodation for Disabilities**

In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to “reasonable accommodations.” Please notify the instructor during the first week of class of any accommodations needed for the course.
Academic integrity
As a program that helps to create business and government leaders, the College of Business has an obligation to ensure academic integrity is of the highest standards. Standards of academic integrity will be enforced in this course.

University regulations will be strictly enforced in all cases of academic irregularities, cheating or plagiarism or any variations thereof. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work.

All UNCC students have the responsibility to be familiar with and to observe the requirements of The UNCC Code of Student Academic Integrity (see the Catalog). This code forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism of written materials and software projects, abuse of academic materials (such as Library books on reserve), and complicity in academic dishonesty (helping others to violate the code).

Diversity Policy

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.