### INSTRUCTOR’S INFORMATION

(Instructor reserves the right to amend this information as necessary.)

<table>
<thead>
<tr>
<th>Semester and Year</th>
<th>Fall 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>8440</td>
</tr>
<tr>
<td>Class time and days</td>
<td>eCampus; ConnectPlus, MTWTRF</td>
</tr>
<tr>
<td>Room</td>
<td>Online</td>
</tr>
<tr>
<td>Instructor</td>
<td>J. P. Hill</td>
</tr>
<tr>
<td>Contact Info</td>
<td>L245; 972-238-6214; <a href="mailto:jhill@dccc.edu">jhill@dccc.edu</a></td>
</tr>
<tr>
<td></td>
<td>Office Hours: 11:00am-12:20pm (MW) 9:30am-10:30am (TR) 10:30am-11:30am (F)</td>
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<tr>
<td>No outside appointments</td>
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<tr>
<td>Last date to withdraw:</td>
<td>Thursday, November 30th</td>
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<tr>
<td>Final Exam Day and time:</td>
<td>By the close of the Testing Center on December 11th</td>
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<tr>
<td>ConnectPlus Course ID:</td>
<td>In ecampus</td>
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</tbody>
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### Evaluation Procedures

Students will be evaluated on the basis of participation and examinations:

- **42%** Campus Tests (see part (b))  
  **(NO MAKE-UP TESTS – NO EXCEPTIONS)**
- **7%** Online Homework (see part (a))  
  **(NO MAKE-UP ASSIGNMENTS – NO EXCEPTIONS)**
- **3%** Orientation (see Attendance Policy)  
  **(NO MAKE-UP – NO EXCEPTIONS)**
- **6%** Discussion Board (see part (d))  
  **(NO MAKE-UP – NO EXCEPTIONS)**
- **12%** Review Quizzes (see part (e))  
  **(NO MAKE-UP – NO EXCEPTIONS)**
- **29%** Campus Final Exam (see part (c))  
  **(NO MAKE-UP FINAL EXAM – NO EXCEPTIONS)**

There will be a total of:

(a) The WEEKLY online homework assignments are located within ConnectPlus ONLY and ARE NOT TIMED. Having technical issues with opening and/or completing an online homework assignment is NOT AN EXCUSE (During the first week of class, YOU are to ensure that the software works properly (meaning you can pull up the tutorials) on YOUR computer). Your online homework grade will be recorded in ConnectPlus. Here are some general rules to follow when attempting to complete your online homework assignments located within ConnectPlus:

1. **DO NOT WAIT UNTIL A COUPLE OF HOURS BEFORE THE CUT OFF TIME OF THE DUE DATE TO COMPLETE YOUR HOMEWORK ASSIGNMENT** (Remember, you will have to have your online homework assignments completed by 11:59pm (CST) on the due date!). If you run into technical issues, you will not have them resolved in time and your grade will stand. ALWAY TRY TO ATTEMPT TO COMPLETE YOUR HOMEWORK A DAY OR TWO BEFORE THE DUE DATE.

2. **Please make sure that you have gone through the online mini-tutorial before entering your answers.** These are usually located within the homework set.

3. **IMPORTANT:**  
   (a) For each online homework assignment, you will have 3 chances to complete an assignment (you can always “save and exit” anytime within assignment to save your work and come back to it at a later time, before the deadline).

7/18/2012 Revised for Fall 2012
(b) For each question within an online homework assignment, you will have 3 attempts to type in the correct answer. After your 3 attempts are used (you are out of retries), you will not be allowed to change your answer (you can go back to the question, but you will not be allowed to change your answer). **Be sure to note the number of attempts for each problem in the blue box, above the problem, in the upper right side.** Please keep in mind, you may run into a particular problem that will only have 1 attempt – this is the prerogative of the author of the algorithm for that particular problem – not your Instructor.

(c) You can complete the assignment in the order the questions are given or you can move around by selecting the question you wish to work on/answer at that time.

(b) Three (3) on campus Tests – The Tests assess your understanding of the concepts you PRACTICED within your online homework, textbook practice problems and Review Quizzes by coercing you to APPLY what you’ve learned. One of the best ways to prepare for your Tests is to complete sample problems in your textbook WITH YOUR BOOK AND NOTES CLOSED (since you will not/should not have those tools when taking your test on Campus). Your Tests scores will be recorded in eCampus. **YOUR TESTS ARE NOT TIMED.** You will only have one attempt to complete your tests. Tests are to be taken on the Richland College campus within the Testing Center, M105. Students are responsible for contacting the Testing Center to inquire about the testing policies, etc.

Lowest Test grade replaced with the average of the two highest Test grades pending Attendance Policy.

**IMPORTANT:** Proctored Tests will be considered only for those students whose legal residence is more than 35 miles (the expanse of the Dallas Metroplex) from the postal address of Richland College. Please contact your Instructor immediately starting October 22nd if you believe you should be considered.

(c) One (1) Campus Final Exam – **YOUR FINAL EXAM IS NOT TIMED.** You will only have one attempt to complete your final exam. The Final Exam is to be taken on the Richland College campus within the Testing Center, M105. Students are responsible for contacting the Testing Center to inquire about the testing policies, etc.

**IMPORTANT:** Proctored Final Exam will be considered only for those students whose legal residence is more than 35 miles (the expanse of the Dallas Metroplex) from the postal address of Richland College. Please contact your Instructor immediately starting October 22nd if you believe you should be considered.

(d) Discussion Board points must be earned (just as your online homework grades and Test grades are earned). You are required to participate in each of the weekly forums (there will be 8 of them) within the discussion board (please see the requirements for each forum once it becomes available). Each forum is worth 5 points for each completely worked response output produce (for a total of 40 points). The following penalties are observed:

1. If you miss participating/fail to participate correctly in any one (1) forum, you will forfeit 5 Discussion Board points for that forum.
2. If you miss participating/fail to participate correctly in more than two (2) forums, you will forfeit ALL Discussion Board points for the semester.

**THERE ARE NO EXCEPTIONS OR FORUM DEADLINE EXTENSION – DO NOT ASK FOR ONE (each forum will have its own participation requirements and deadline).**

(e) Each on campus Test has a Review Quiz that will be completed online within ConnectPlus ONLY and each Review Quiz **IS NOT TIMED.** The Review Quiz is an excellent chance to prepare for the on-campus Tests and you will have three attempts to take it (the highest score will be counted).

Having technical issues with opening and/or completing a Review Quiz is **NOT AN EXCUSE** (During the first week of class, YOU are to ensure that the software works properly (meaning you can pull up the tutorials) on YOUR computer). Your Review Quiz grade will be recorded in ConnectPlus. **DO NOT WAIT UNTIL A COUPLE OF HOURS BEFORE THE CUT OFF TIME OF THE**
DUE DATE TO COMPLETE THE REVIEW QUIZ (Remember, you will have to have your Review Quiz completed by 11:59pm (CST) on the due date!). If you run into technical issues, you will not have them resolved in time and your grade will stand.

The following point system shall be used:

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<thead>
<tr>
<th></th>
<th>Points</th>
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<tbody>
<tr>
<td>Orientation</td>
<td>20</td>
</tr>
<tr>
<td>Discussion Board</td>
<td>40</td>
</tr>
<tr>
<td>Review Quiz 1</td>
<td>30</td>
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<tr>
<td>Review Quiz 2</td>
<td>30</td>
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<tr>
<td>Review Quiz 3</td>
<td>30</td>
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<tr>
<td>Test 1</td>
<td>100</td>
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<tr>
<td>Test 2</td>
<td>100</td>
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<tr>
<td>Test 3</td>
<td>100</td>
</tr>
<tr>
<td>Homework</td>
<td>50</td>
</tr>
<tr>
<td>Final</td>
<td>200 (Final is worth 100 points – however, it is counted twice)</td>
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<td>700</td>
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Please remember, for this course, grades are NOT given, grades are EARNED. If you need an “A” or “B” or “C” for the semester in this course, then it is your responsibility to EARN those grades by performing the work (based on the outline stated above), to the best of your ability.

Based on the point system, the following grade scale shall be used:

A 627 and above  
B 557 to 626  
C 487 to 556  
D 417 to 486  
F 416 and below

Letter grades are assigned according to the following:

A [90%, 100%], B [80%, 90%), C [70%, 80%), D [60%, 70%), F [0%, 60%]

Attendance Policy: You are required click on the “Virtual Orientation” link within eCampus (when it becomes available) and go through the steps in an effort to orientate yourself with the Course structure and policies:

It is your responsibility to

1) return your FULLY COMPLETED information sheet/online contract to me, BY EMAIL ONLY, by 12:00pm (CST) on Friday, October 26th. This means your document must be received in my inbox by 12:00pm (CST) on Friday, October 26th AND your document must be accepted by me, the Instructor, in order for you to receive all 20 Orientation points AND be allowed to replace your lowest test score with the mean (average) of your two highest test grades (the information sheet/online contract will be made available in eCampus starting the first day of classes on October 22nd).

Incomplete and/or incorrectly saved documents WILL NOT BE ACCEPTED – NO EXCEPTIONS – PERIOD. It is very imperative that you follow the instructions EXACTLY as stated within eCampus in order to avoid NOT receiving your Orientation points due to your NOT following directions.

If the information sheet/online contract is submitted after the October 26th deadline, but before the official withdrawal date, AND is accepted by me, the Instructor, then you will NOT receive any Orientation points (your Orientation points will be zero (0)), BUT you will be allowed to replace your lowest test score with the mean (average) of your two highest test grades.

If the information sheet/online contract is only submitted after the official withdrawal date, AND is accepted by me, the Instructor, then you will NOT receive any Orientation points (your Orientation
points will be zero (0)) AND you will NOT be allowed to replace your lowest test score with the mean (average) of your two highest test grades;

2) go through ALL the content within eCampus and the online orientations on the ConnectPlus class homepage.

So make sure you submit it in plenty of time (since you cannot control server/network mishaps) – there will be NO EXCEPTIONS.

Required Materials: Several options exist. The book and ConnectPlus are required.

Connect Access Code, McGraw Hill
A calculator. Preferably scientific or graphing.

There are several different ways that these may be purchased. The ISBNS are:

- 987-0-077-87174-1 Three-hole punched package, includes Connect Plus (includes eBook)
- 978-0-077-87155-0 Textbook with Connect Plus (includes eBook)
- 978-0-077-48622-8 Connect Plus Access Card (includes eBook)
- 978-0-077-43096-2 Connect Access Card (no eBook)
- 978-0-073-51957-9 Textbook
- 978-0-077-43117-4 3-hole punched textbook only
- 978-0-077-43095-5 CourseSmart eBook

The 8th edition and the 9th edition are very similar. The Connect Plus includes the eBook if students want to continue using the 8th edition.

Please price your books carefully. One of the packages is usually less expensive than even a used book plus the Connect access.

Class Calendar: The schedule included is NOT subject to change. The due dates are set and will not be flexible unless the Instructor deems necessary for the entire Class. This course covers chapters 7, 8, 9, 10 & 11. All Online Homework Assignments, Review Quizzes, and Forums are due by 11:59 PM on the due date.

<table>
<thead>
<tr>
<th>Week</th>
<th>Sections to Cover</th>
<th>Due Date(s)</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction Chapter 7 - Statistics</td>
<td>Discussion Board Forum 1 due 10/26</td>
</tr>
<tr>
<td>10/22 – 10/28</td>
<td>7.1 Collecting and Graphing data</td>
<td>Online Homework #1 (7.1 – 7.3) due 10/27</td>
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<td></td>
<td>7.2 Describing and Analyzing Data</td>
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<td></td>
<td>7.3 Sampling, Predictions, and Simulations</td>
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<td>By the end of Week 1, TECHNICAL ISSUES WILL NOT BE AN EXCUSE FOR MISSED ONLINE</td>
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<tr>
<td></td>
<td>HOMEWORK ASSIGNMENTS.</td>
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<tr>
<td>Week 2</td>
<td>Chapter 8 - Probability</td>
<td>Discussion Board Forum 2 due 11/2</td>
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<tr>
<td>10/29 – 11/4</td>
<td>8.1 – Single-Stage Experiments</td>
<td>Online Homework #2 (8.1,8.2) due 11/3</td>
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<td>8.2 – Multistage Experiments</td>
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<td></td>
<td>Chapter 9 – Geometric Figures</td>
<td>Online Homework #3 (9.1,9.2) due 11/3</td>
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<td></td>
<td>9.1- Plane Figures</td>
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<tr>
<td></td>
<td>9.2 Polygons and Tessellations</td>
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### Week 3  
11/5 – 11/11

- Review Quiz 1 (should be completed before Test 1)  
  **Test 1**- will cover Chapters 7 & 8

- Discussion Board Forum 3 due 11/8  
  Review Quiz 1 due 11/9  
  Test 1 to be completed within the Testing Center no later than **11/10**

### Week 4  
11/12 – 11/18

- Chapter 9 – Geometric Figures  
  9.3 Space Figures  
  9.4 Symmetric Figures  
  Chapter 10- Measurements  
  10.1 Systems of Measurement  
  10.2 Area and Perimeter

- Discussion Board Forum 4 due 11/16  
  Discussion Board Forum 5 due 11/16  
  Online Homework #4 (9.3,9.4) due 11/17  
  Online Homework #5 (10.1,10.2) due 11/17

### Week 4  
11/19 – 11/25

- Review Quiz 2 (should be completed before Test 2)  
  **Test 2**- will cover Chapters 9 & Sections 10.1, 10.2  
  11/22 and 11/23 - Richland College will be CLOSED in observance of Thanksgiving Holiday  
  (Your Instructor will NOT be available for email/phone correspondence from during this time and weekend/holiday email etiquette applies for 11/22 and 11/23).

- NO Discussion Board Forum 6 (free 5 points for entire Class)  
  Review Quiz 2 due 11/20  
  Test 2 to be completed within the Testing Center no later than **11/21**

### Week 5  
11/26 – 12/2

- **11/30 is the Drop Date for this Course.**  
  Chapter 10- Measurements  
  10.3 Volume and Surface Area  
  Chapter 11- Motions in Geometry  
  11.1 Congruence and Constructions  
  11.2 Congruence Mapping  
  11.3 Similarity mapping

- Discussion Board Forum 7 due 11/30  
  Online Homework #6 (10.3) due 12/1  
  Online Homework #7 (11.1,11.2) due 12/1

### Week 6  
12/3 – 12/9

- Review Quiz 3 (should be completed before Test 3)  
  **Test 3** – will cover Section 10.3 & Chapter 11

- Discussion Board Forum 8 due 12/6  
  Online Homework #8 (11.3) due 12/7  
  Review Quiz 3 due 12/7  
  Test 3 to be completed within the Testing Center no later than **12/8**

### Week 7  
12/10 – 12/13

- Review for Final Exam  
  **Final Exam**

- The Final Exam is comprehensive. It will be loosely based on the problems found on all 3 previous tests. All Final Exam papers will be graded and Final Exam grades will be posted within eCampus sometime after the 12/11 deadline, but before 12/13. No Final Exam paper will be graded before the deadline. Final Semester grades will be posted within eCampus sometime after the 12/11 deadline but before 12/13. The Final Exam will be available starting 12/3. Comprehensive Final Examination must be taken by the close of Testing Center on Tuesday, December 11th

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**Instructor Policies and Suggestions for Student Success:**

1. **Have the necessary materials.** **NOTE:** A graphing calculator is necessary for success in this class. A
scientific or graphing calculator is recommended. A TI-89 or TI-92 or TI-Inspire will not be permitted on tests.

2. Academic honesty.
   (a) Use of books or notes (SCRATCH PAPER INCLUDED) on Tests and the Final Exam is considered cheating and will earn a zero immediately on the Test or Final Exam in question.
   (b) Your name will also be turned in to the Dean of Students who could follow up with other action.

3. Adhere to the time frame of the calendar.
   (a) Online homework assignments will constitute a total of 50 points of your total points.
   (b) All online homework assignments are to be completed by 11:59pm (CST) on the due date. **Late work is not accepted for ANY reason.**
   (c) Tests and Final Exam
      • No make-up Tests or Final Exam, are given for any reason.
      • You have one opportunity to take a test or final exam. The Tests are designed to be an hour long Tests and the Final Exam is designed to be a 1 hour and 15 minutes exam.
      • Tests and the Final Exam, ARE NOT TIMED and must be completed by the close of the testing center on the last date to take them. It is your responsibility to allow enough time to take the tests and final exam and to know the hours for the testing center and the times at which they give out the last test. Any missed test will earn the grade of zero.

4. Get help when you need it.
   (a) Don’t wait until you’ve failed the first three tests to get help. It will be too late.
   (b) Join a study group.
   (c) There are tutors available in the math lab located in the Center for Tutoring and Learning (TLC), M 216. The hours are posted each semester. You must have a current Richland College student ID to use these resources. I encourage the use of the TLC.
   (d) Get a private tutor.
   (e) If you have a question about something, please ask. **I am available by email or phone.** You are welcome to visit me during office hours. They are listed above. I am available most of the time by email for questions. I make every effort to respond quickly; however, I will always respond within 48 hours, after I have opened and read your email. All emails received after 10:00am on Fridays will be responded to on Monday. Holidays and weekends are exempt from the 48 hours; I will respond as quickly as I possibly can after weekends and holidays.

5. Studying must become a daily activity.
   (a) It is assumed that you will need approximately 10 hours per week to work on the computer and read the chapter and take tests. That is considered “in-class time”.
   (b) You should also expect to put in about 4 – 12 hours over and above that time working on textbook practice problems, online homework assignment, chapter reviews, and studying.

College Policies and Procedures:

For Institution Policies, please refer to Richland College Institution Policies (http://www.richlandcollege.edu/syllabusinfo/syllabusinformation.pdf)

**RICHLAND COLLEGE’S QUALITY ENHANCEMENT PLAN – LEARNING TO LEARN: DEVELOPING LEARNING POWER.**

Richland College is piloting its Quality Enhancement Plan (QEP) in select classes. The QEP provides techniques, practices, and tools to help students develop the habits, traits or behaviors needed to be effective
and successful lifelong learners in college and in life. For more information, please check QEP 2013 (http://www.richlandcollege.edu/qep2013)

ACADEMIC PROGRESS: Students are encouraged to discuss academic goals and degree completion with their instructors. Specific advising is available throughout the semester. Check Richland College Steps to Success (http://www.richlandcollege/admissions/process.php)

CATALOG COURSE DESCRIPTION
Concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4 – 8) certification.

PREREQUISITES
Math 1350

COURSE OBJECTIVES
The specific objectives are to:
1. Develop problem solving skills with respect to problems presented in grades 4 – 8 mathematics
2. Develop the foundation for and the understanding of basic concepts of topology
3. Develop the foundation for and the understanding of basic concepts of geometry and measurement.
4. Develop the foundation for and the understanding of basic concepts of probability and statistics.
5. Develop the foundation for and the understanding of transformations and reflections.
6. Experience the use of manipulatives that will be used in the grades 4-8 classroom
7. Develop effective mathematical communication skills.

CORE CURRICULUM STATEMENT
The first college level math course that a student takes satisfies the core curriculum math requirement. This is a Core Curriculum course.
The Core Intellectual Competency met in this course is:
Critical Thinking --- Think and analyze at a critical level.
The Core Area Exemplary Educational objectives covered in this course are:
1. To apply arithmetic, algebraic, geometric, higher-order thinking and statistical methods to modeling and solving real-world situations.
2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.
5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them
6. To recognize the limitations of mathematical and statistical models.
7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understanding its connections to other disciplines.

STUDENT LEARNING OUTCOMES
The student learning outcomes addressed in this course are
1. Communicate effectively
   • Read and write at the college level and appropriately for a large audience in professional work
   • Speak appropriately for the given audience
2. Solve Problems
Use critical thinking and ethical reasoning
Employ creative approaches
Apply scientific reasoning to appropriate situations
Determine needed information and use it purposefully to solve problems in new and different contexts

SPECIFIC CONTENT COVERAGE FOR THIS COURSE

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>7.1</td>
<td>Collecting and Graphing Data</td>
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<td>11.3</td>
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