Math 116 – College Algebra
Summer 2017 Course Syllabus
James Jones, Professor of Mathematics
Mathematics, Science, & Business Division – Richland Community College

Course Meeting Information
Section 01 meets from 10:00 am to 11:50 am on Monday, Tuesday, Wednesday, and Thursday in room W118a on Richland’s main campus. This course meets from May 30th through July 20th.

This is a face-to-face course, but the Canvas learning management system will be used. There is an online student orientation to Canvas and the College that must be completed prior to obtaining access to your courses in Canvas. We will not be using MyMathLab with this course.

Instructor Information
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Canvas: https://richland.instructure.com

The best way to contact the instructor outside of class is through Canvas or by email. Please do not leave a voice mail as it will not reach the instructor in time to help you.

Office Hours
Office hours are not required of instructors during the summer term. If you have questions, please make arrangements to see me before class or after class.

Text
(Required)

Electronic versions of the textbook are acceptable. We will not be using MyMathLab in this course.

Student Audience
College Algebra is the first college-level algebra course and serves as a gateway course into many of the science, engineering, technology, and mathematics (STEM) courses. It is also recommended for business, sequestration, network technology, programmer/analyst, chemistry, and computer science courses.
Prerequisite
The prerequisite for Math 116, College Algebra, is eligibility for ENGL 101 and one of the following: 1) MATH 098 with a C or better grade and MATH 095 with a C or better grade or one year of high school geometry, (2) satisfactory score on the mathematics placement exam, (3) a score of 22 or higher on the math ACT within three years of enrollment, and (4) a score of 560 on the math SAT within three years of enrollment).

Course Description
MATH 116 – College Algebra
Hours: 4 lecture - 0 lab - 4 credit

Math 116, College Algebra, is a concentrated study of the topics traditionally found in College Algebra. The topics include a quick and intense review of the topics from Intermediate Algebra, including algebraic expressions, polynomials, equations, problem solving, complex numbers, and graphing. Major topics include functions, exponential and logarithmic functions, matrices, polynomial equations, inequalities, introduction to analytic geometry, conic sections, systems of equations, mathematical induction, and the binomial expansion theorem. A graphing calculator is required.

Applicable toward graduation where program structure permits.

- Certificate or degree: All certificates, A.A.S., A.L.S., A.A, A.S.
- Group requirement: Mathematics
- Area of Concentration: Not applicable.

Illinois Articulation Intiative (IAI)
The Illinois Articulation Initiative is a statewide transfer agreement. Their website is at http://www.itransfer.org.

The mathematics component of general education focuses on quantitative reasoning to provide a base for developing a quantitatively literate college graduate. Every college graduate should be able to apply simple mathematical methods to the solution of real-world problems. A quantitatively literate college graduate should be able to:

- interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them;
- represent mathematical information symbolically, visually, numerically, and verbally;
- use arithmetic, algebraic, geometric, and statistical methods to solve problems;
- estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results; and
- recognize the limitations of mathematical and statistical models.
Courses accepted in fulfilling the general education mathematics requirement emphasize the development of the student's capability to do mathematical reasoning and problem solving in settings the college graduate may encounter in the future. General education mathematics courses should not lead simply to an appreciation of the place of mathematics in society, nor should they be merely mechanical or computational in character.

To accomplish this purpose, students should have at least one course at the lower-division level that emphasizes the foundations of quantitative literacy and, preferably, a second course that solidifies and deepens this foundation to enable the student to internalize these habits of thought.

*Math 116, College Algebra, does NOT satisfy the Illinois Articulation Initiative Definition of a General Education Mathematics Course.*

**Illinois Mathematics and Computer Science Articulation Guide**

The following statement is a joint statement of the Illinois Mathematics Association of Community Colleges (IMACC) and the Illinois Section of the Mathematics Association of America (ISMAA). It is contained in the *Illinois Mathematics Computer Science Articulation Guide* (IMACC, 2016, p. 2)

While College Algebra and Precalculus courses are taught at post-secondary institutions where needed, these courses should not fulfill general education or quantitative literacy requirements. The content and instructional pedagogy applied in these courses should continue to be reviewed with the goal of preparing students to be successful in calculus and other courses that depend on a similar level of knowledge, rigor and maturity. Adjustments to these courses should attempt to build upon appropriate changes in the K-12 curriculum that are a part of state-wide efforts to advance achievement for all students and, in particular, to smooth the transition from school to college.

Departments are advised not to attempt to design and teach college algebra and pre-calculus courses with the dual purpose as preparation for calculus and meeting goals for quantitative literacy and general education requirements. Expectations for mastery of the objectives considered essential preparation for subsequent calculus courses must take priority and time constraints, together with cognitive demands on the student group to be served, suggest such dual purpose courses are not likely to be successful.

**Course Objectives**

Upon successful completion of this course, the student should be able to

- use the Rule of Four (verbal, numeric, algebraic, and graphical representations) when required as well as choosing the best method when given a choice;
- demonstrate an understanding of the concepts related to functions and their inverses;
- identify and graph quadratic, polynomial, rational, exponential, and logarithmic functions as well as the conic sections; also, demonstrate knowledge of the properties of these functions and relations and apply this knowledge to real world situations;
- demonstrate proficiency in solving linear and non-linear systems using various algebraic, matrix, and graphical methods
- graphically represent the solutions to inequalities and system of inequalities that involve two variables.
- use appropriate theorems and techniques to locate the roots of second and higher degree polynomial equations.
- use the notation and formulae associated with arithmetic and geometric sequences and series.
- demonstrate knowledge of binomial expansion and Pascal's triangle.
- use technology appropriately in problem solving and in exploring and developing mathematical concepts.

**Topical Outline**

This course will cover the topics listed below, which are tied to the textbook. The times spent on each topic are approximate as material may be reordered, intermixed, or repeated. The time estimates do not include the midterm or final exams.

**Graphs, Functions, and Models – 2 hours**

- A review of graphing in the Cartesian coordinate system: points, lines, intercepts, midpoints, distance formula, circles, and parabolas
- Relations vs functions, graphing a function, vertical line test, domain and range, applied problems using functions
- Linear functions, finding and interpreting slope, slope-intercept form of a line, horizontal lines, vertical lines
- Equations of lines, modeling, parallel and perpendicular lines, fitting regression lines and making estimations
- Solving linear equations, applications of linear functions, and finding roots of linear functions
- Solving linear inequalities including compound inequalities

**More on Functions – 6 hours**

- Classifying intervals where a function is increasing, decreasing, and constant; finding relative extrema; graphing piecewise functions
- Combining functions using sums, differences, products, and quotients; finding the difference quotient and relating it to slope of the secant line and average rate of change.
- Composition and decomposition of functions, stressing importance in Calculus
- Symmetry with respect to the x-axis, y-axis, and origin; even and odd functions
Transformations of functions including shifts, stretches, and reflections. Practice quick sketching by transforming the basic functions: constant, linear, quadratic, cubic, square root, cube root, and absolute value

**Quadratic Functions – 6 hours**

- Complex numbers, their conjugates, and calculations
- Quadratic equations and solving by factoring, extracting roots, completing the square, and using the quadratic formula including hints for when each method is appropriate. Using the discriminant to identify the number and types of solutions. Substitutions to solve quadratic-like equations
- Graphing quadratic functions, finding the vertex and axis of symmetry, placing into standard form by completing the square
- Solving and graphing rational equations, solving radical equations including checking for extraneous solutions
- Solving equations and inequalities with absolute value including the piecewise definition of absolute value

**Polynomials and Rational Functions – 10 hours**

- Leading-term test to determine end-point behavior, factoring polynomials to find zeros and multiplicities, graphing to find extrema, and fitting polynomials to data
- Graphing polynomials, maximum number of x-intercepts, maximum number of turns, intermediate value theorem
- Polynomial division, synthetic division, remainder theorem for evaluating a function and determining in the value is a zero
- Fundamental theorem of algebra, complex roots come in pairs for real coefficients, irrational roots come in pairs for rational coefficients, Rational root theorem for integer coefficients, Descartes' Rule of Signs.
- Rational functions: domain, range, asymptotes
- Polynomial and rational inequalities, sign charts, speed charting (sign changes based on multiplicity of factors)

**Exponential and Logarithmic Functions – 8 hours**

- Inverse functions, one-to-one functions, horizontal line test, finding inverses, composition of functions with their inverses
- Exponential functions, the number e, graphs of exponential functions
- Finding common logarithms and natural logarithms with and without a calculator, contrast of logarithmic graphs with exponential graphs, converting between exponential and logarithmic equations, change of base formula
- Properties of logarithms including products, quotients, and powers. Combining multiple
logarithms into a single logarithm. Expanding an individual logarithms into sums, products, and differences of multiple logarithms.

- Solving logarithmic and exponential functions
- Applications of exponential and logarithmic functions

**Systems of Equations and Matrices – 8 hours**

- Solving systems with two variables: substitution, addition/elimination, and graphing. Definitions of consistent, inconsistent, dependent, independent
- Solving systems with three variables by elementary operations and systematic elimination to perform back-substitution
- Matrices and row-equivalent operations, Gaussian elimination and back-substitution with matrices, row-echelon form and reduced row-echelon form, Gauss-Jordan elimination without back-substitution
- Scalar multiplication; matrix addition, subtraction, multiplication, and equality; coefficient matrices and matrix equations
- Identity matrix; inverse of a 2×2 matrix, finding inverses using augmented matrix, matrix solutions to a system of equations
- Determinant of a 2×2 matrix, minors and cofactors, determinant of a square matrix, Cramer's rule
- Linear inequalities and systems of linear inequalities
- Partial fraction decomposition, basic equation, undetermined coefficients, cover-up method

**Conic Sections – 6 hours**

- Parabolas: vertex, focus, axis of symmetry, directrix, standard form, completing the square, eccentricity, graphs, applications
- Circles: center, radius standard form. Ellipses: standard form, major axis, minor axis, vertices, foci, directrix, Pythagorean relationship, eccentricity, graphs, applications
- Hyperbola: standard form, center, transverse axis, conjugate axis, asymptotes, vertices, foci, directrix, Pythagorean relationship, eccentricity, graphs, applications
- Non-linear systems of equations and inequalities. General quadratic equation and identifying shape by inspection: circle, ellipse, hyperbola, parabola, point, no graph, intersecting lines, parallel lines, and line

**Sequences, Series, and Combinatorics – 10 hours**

- Sequences, infinite sequences, series, n-th partial sum, summation notation, recursion
- Arithmetic sequences: common difference, general term, sum of first n terms
- Geometric sequences and series: common ratio, general term, some of first n terms, sum of infinite series
- Mathematical induction
Counting principle, factorials, permutations, combinations, binomial notation, distinguishable permutations

Binomial expansion theorem with Pascal's Triangle and with combinations

**Method of Evaluation**

Evaluation could include any of the following: problem solving exams, objective exams, essays, research papers, oral presentations, group projects, individual projects, classroom engagement, classroom activities, quizzes, and homework.

**Traditional Algebra Course**

In the traditional algebra course, students are used to doing homework and taking exams. In this course, these two areas will not receive as much focus as you might expect.

The way you get good at something is by practicing it – ask anyone involved in sports. Homework is normally considered to be the mathematical equivalent of practice. However, while people involved in sports don’t question the need for practice if they want to be great, students don’t feel the need to be great in math, most just want to get out of the course.

Complicating matters is that student solutions manuals can easily be found on the internet and there are websites that provide worked out solutions to all of the problems in the textbook.

We have a situation the students that need the practice the most are those that are most likely to look for ways to get out of doing it, so it doesn’t benefit them. The students who are at the top of the their game don’t see the need the practice, and feel they are wasting their time when they could be doing something else. This leads to even the best students being tempted to just copy the answers from somewhere. In either case, the instructor has no idea whether the student actually did the work themselves, had someone else do it for them, or just copied the answers from somewhere (students like to pull the "It’s so easy I did it in my head" line when explaining why there is no work shown).

While almost every student could benefit from homework, few actually do from homework as it has traditionally been handled.

Instructors have long realized the diminishing role of homework, but continue to assign it because students need the practice and there’s not an easy alternative. Some have moved from using homework as practice to do well on the exams to using homework as a buffer against poor exam scores.

The major problem with buffering the exams with the homework is that it places too much emphasis on the exam. End-of-unit exams encourage poor study habits in students. Students put off learning the material until right before the exam and then they promptly forget the material after taking the exam. This is not an effective way of learning material and is not conducive for long term comprehension and understanding.
Remember that College Algebra is a skills course and does not qualify as a general education course. Most of you will be taking another course that needs the material in the course and so we expect that you will take the concepts with you when you leave, not that you forgot them once the exam was over.

The reliance upon exams for the sole means of assessments places stress on those students who face test anxiety and perform poorly on exams. They know the material, they can demonstrate it in class, but for some reason freeze when you put an exam in front of them. For these students, their grade on the exams does not reflect their true level of understanding of the material.

Exams have their place and will be around for a long time in education, but there needs to be other forms of assessment as well.

**Classroom Activities and Quizzes – 30%**

Much of the assessment of learning will take place in the form of interactive classroom activities. These are often in the form of an online game like Kahoot! or a classroom response system like QuestionPress. These allow the instructor to get immediate feedback on each student's level of understanding and take steps to explain weaknesses – in the middle of the activity.

At other times, we will use peer instruction, where the class can benefit from working together to increase understanding of the concepts.

Because of the interactive nature of these activities, classroom activities cannot be made up if you miss them.

As there will occasionally be technical issues, a 10% discount applied to any classroom activities used as a grade. A 10 point activity will be recorded in the gradebook as being worth a possible 9 points. This also means that there is the chance to earn a few extra points.

Students should read the material and attempt the problems before coming to class as some of the interactive quizzes will make the assumption that you have already familiarized yourself with the material.

There may be some quizzes administered through Canvas or another system. These are not interactive in nature and do not receive the 10% discount.

The lowest scoring activity or quiz will be dropped from the gradebook.

**Application Projects and Take Home Quizzes – 30%**

There will be projects and take home quizzes during this course.

The application projects extend some of the applications of logarithmic functions, exponential
functions, matrices, conic sections, and sequences. These occur in the last half of the course, so the projects will seem bunched at the end.

Most of the projects will be available for at least a weekend and a class period. For example, they will be given on Wednesday and due on Monday or given on Thursday and due on Tuesday. You should begin the project as soon as you can, rather than waiting until it is due, so that you can ask questions if you have them.

The take home quizzes will be much shorter than a regular exam and will cover material from the chapter just finished. In some cases, they could be given in class, but time is at a premium in this course. They will usually involve problems that require using your graphing calculator or problems that are too involved to be assessed with an interactive class activities where questions are given limited time or the format does not support the kind of answer needed.

Take home quizzes are designed to be available for two (2) days. This gives you a chance to ask questions about them the next class period and then still work on them another day. In most cases, they will be handed out during Tuesday's class and due at the beginning of Thursday's class.

The application projects and take home quizzes will be graded holistically using the awesome, good, okay, fair, poor, or none scale.

You are encouraged to help each other out, but not to do the work for them. These problems are individual assignments unless otherwise noted.

Application projects and take home quizzes will be available inside Canvas and become available the morning they will be handed out in class. You are welcome to download a copy from Canvas if you wish to get started on the material earlier than class. Answers to the projects and quizzes will available inside Canvas after the assignment is collected.

Because the answers will be made available shortly after the assignment is due, application projects and take-home quizzes will not be accepted late. If you anticipate that you will be absent when an assignment is due, you can turn it in early.

**Midterm Exam – 10%**

There will be a midterm exam that covers the concepts in chapters 1–4.

This will be a traditional paper and pencil exam conducted in the classroom. You should bring your calculator, although you should expect that portions of the exam will be worked without the use of a calculator.

**Comprehensive Final Exam – 20%**

There will be a comprehensive final exam focusing on the major concepts of the course. A
study guide will be made available to the students prior to the exam.

The final exam occurs on the last day of class. There will be no additional class meetings after the final and no late work will be accepted after the final.

**Graphical Explorations – 10%**

Being able to use technology appropriately is important in this class. These graphical explorations are a series of documents that will have you using graphing technology to answer questions or emphasize important concepts from the course.

In some cases, they may be as simple as creating graphs and pasting them into a document. In other cases, you will need to come up with your own graphs and explanations.

The graphical explorations will be graded holistically using the awesome, good, okay, fair, poor, or none scale.

**Grading Policy**

Letter grades will be assigned to final adjusted scores as follows:

- A: 90–100%
- B: 80–89%
- C: 70–79%
- D: 60–69%
- F: below 60%

Final scores will be rounded to the nearest whole number, so a 79.5% will be considered a "B".

The overall score will be a weighted average of the following areas.

- 30% comes from classroom activities and quizzes
- 30% comes from application projects and take home quizzes
- 30% comes from a midterm exam and comprehensive final exam
- 10% comes from graphical explorations

**Holistic Grading System**

Grades in a math course are typically assigned based on the percentage of the questions that you answer correctly. This works fairly well for objective exams where each question is assigned a point value and you are awarded points based on how well you answer each question. It does not work quite as well on subjective material worth a few points.

The instructor has tried rubrics where points are assigned for each little item. Students like it because they know exactly what needs to be done, but there's little lee-way or discretion on the instructor's part to reward excellent work. Students end up with low scores for leaving out part of the assignment that happened to be on the rubric, but don't benefit when they do something that was left off the rubric. Rubrics are typically set up so that you can get a maximum of 100% and you lose points for every little thing you do wrong, rather than rewarding you for doing things well. Canvas doesn't allow you to automatically deduct points
for being late, so if you want to grade on timeliness, you need to have a rubric category for that, which reduces the points that you can give for the quality of the assignment.

To help counter some of the problems, the instructor has come up with a holistic rubric that looks at the complete product rather than assigning points for each individual question within it. Doing exceptionally well in one area may make up for doing poorly in another. If you do an exceptional job, then you can actually score some bonus points.

The holistic grading system will be used on the graphical explorations, the application projects, and the take home quizzes.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awesome</td>
<td>105%</td>
<td>Exceptional job that really impresses the teacher</td>
</tr>
<tr>
<td>Good</td>
<td>90%</td>
<td>Beyond what was required</td>
</tr>
<tr>
<td>Okay</td>
<td>75%</td>
<td>Satisfactory completion of requirements</td>
</tr>
<tr>
<td>Fair</td>
<td>60%</td>
<td>Almost there, but needs some development</td>
</tr>
<tr>
<td>Poor</td>
<td>45%</td>
<td>Minimal attempt</td>
</tr>
<tr>
<td>None</td>
<td>0%</td>
<td>Did not participate</td>
</tr>
</tbody>
</table>

There are just six levels and you are guaranteed a minimum of 45% if you turn even the slightest attempt at answering the problems. However, to get an A, you will need to consistently do good and occasionally do awesome.

Late and Missed Work

- Interactive classroom assessments cannot be made up. They do receive a 10% discount in their possible point value (a 10 point item gets recorded as being worth 9 points) and the assignment with the lowest grade will be dropped from the gradebook.
- Application Projects and Take Home Quizzes will not be accepted late as the answers will be made available in Canvas after the assignment is collected. You may turn them in early if you anticipate missing class when they are due.
- Graphical explorations may be turned in late, but doing so will probably adversely affect your grade on the assignment.
- The midterm and the final should be taken as scheduled. Contact the instructor with any concerns about the major exams.
- Absolutely no late work will be accepted after the final exam.

Gradebook

All grades will be entered into and maintained within the Canvas learning management system.

When you look at your grades in Canvas, there may be a + or - after the letter grade (example, B+ or C-). The plus or minus after the letter grade is informational and intended to be used as
an encouragement or a warning that you might be able to move up or that you are in danger of slipping down. However, the final grades in the course will not contain a + or a -, just the letter grade, and an 80.1% is as much of a B as an 88.7% is.

Canvas has a What-If feature that allows you to play around with your grades. If you are concerned about your grades, see the instructor.

**Grade Changes**

Scoring is subject to revision if mistakes are found in the grading. Your grade may increase or decrease when this happens. For this reason, you should strive to do better than the minimum needed.

The potential for some extra credit is already built into the system as the holistic approach used for the graphical explorations, application projects, and take home quizzes has an Awesome category that awards 105% of the possible points.

Do not expect that there will be other extra credit opportunities. If you desire a good grade, then you need to stay focused and perform consistently throughout the semester.

**Attendance Policy**

If you miss the first day of class or any two consecutive days after that without communicating with the instructor, you may be dropped.

Regular attendance is essential for satisfactory completion of this course. Mathematics is a cumulative subject and each day builds on the previous day's material. If you have excessive absences, you cannot develop to your fullest potential in the course.

Students who, because of excessive absences, cannot complete the course successfully, are required to be administratively dropped from the class at midterm. If a student stops attending after midterm, it is the student's responsibility to withdraw to avoid an "F". Do not stop attending and assume that you will be withdrawn from the class by the instructor.

Although dropping students for non-attendance at midterm is required, students who have missed many classes or whose attendance is occasional or sporadic may be dropped from the class at any point during the semester at the instructor's discretion. The safest way to make sure you're not dropped for non-attendance is to continue to attend classes.

The student is responsible for all assignments, changes in assignments, or other verbal information given in the class, whether in attendance or not.

If a student must miss class, send an email or Canvas message to the instructor. Please do not call and leave a voice message unless you are unable to send an electronic message, and then follow up with an electronic message when you are able or talk to the instructor during the next
class session. When a test is going to be missed, the student should contact the instructor ahead of time if at all possible. Under certain circumstances, arrangements can be made to take the test before the scheduled time. If circumstances arise where arrangements cannot be made ahead of time, the instructor should be notified and a brief explanation of why given by either voice or email. This notification must occur before the next class period begins.

**Technology**

The use of technology in this course is consistent with the Technology Statement in the *Illinois Mathematics & Computer Science Articulation Guide* (IMACC, 2016, p. 4). Technology is used to enhance the learning of College Algebra, but it is not the focus of the instruction. There will be instances when we will use the calculator or computer to aid in our understanding or remove some of the tediousness of the calculations (especially in the area of numerical approximations).

Here are some of the technology tools that we may use.

**Graphing Calculator**

This class is a mathematics class and a graphing calculator is required. A scientific calculator is not sufficient. The calculator should be capable of graphing functions, finding roots, maximums, and minimums from a graph, displaying tables of values, and finding the definite integral numerically. A Texas Instruments TI-84 or TI-83 is the recommended calculator. That said, a TI-92, TI-89, or TI Nspire CAS calculator is recommended for this course if you plan on taking additional calculus or engineering courses.

Calculators may be used to do homework and may be used on exams and/or quizzes in class unless otherwise announced.

**Maxima**

Maxima is an open-source computer algebra system that is free for you to download and use at home. It is available from [http://maxima.sourceforge.net/](http://maxima.sourceforge.net/)

**WinPlot**

WinPlot is a free graphing software package for Windows written by the late Rick Parris at Phillips Exeter Academy in Exeter, New Hampshire. The software is useful for creating graphs and it is easy to copy/paste the graphs into other applications. Exeter Academy maintained the server with the software for about 4 years after Parris’ death, but the site is no longer available. To download the software, visit the instructor’s Mathematical Software page at [https://people.richland.edu/james/software](https://people.richland.edu/james/software)
**Additional Supplies**

The student should bring a pencil, paper, and calculator to class each day. You may occasionally want a ruler or graph paper. There will be a paper punch and stapler in the classroom.

**Additional Help**

The student is encouraged to seek additional help when the material is not comprehended. Mathematics is a cumulative subject; therefore, getting behind is a very difficult situation for the student. There are several places where you can seek additional help in your classes.

You may use a recording device to record the lectures. Feel free to use a camera or cell phone to take pictures of the boards if you have trouble getting all of the information into your notes.

**Instructor**

I try to make myself as available to the students as I can. My office hours are listed at the beginning of this syllabus, but those are just the times I'm scheduled to be in my office. Grab me and ask me questions if you see me in the hallway. Ask questions before or after class. If I'm in my office and it's not my scheduled office hours, go ahead and stop in.

The instructor should be considered the authoritative source for material related to this class. If a tutor or other student says something that disagrees with the instructor, believe the instructor.

**Study Groups**

Probably the best thing you can do for outside help is to form a study group with other students in your class. Work with those students and hold them accountable. You will understand things much better if you explain it to someone else and study groups will also keep you focused, involved, and current in the course.

**Mathematics Enrichment Center**

The Mathematics Enrichment Center, located in W117, provides free walk-in tutoring for mathematics courses. There are additional locations available at the Clinton and Fairview extension centers.

**Academic Success Center**

The Academic Success Center consolidates several student services into one area. It is located in the south wing of the first floor next to the Kitty Lindsay Learning Resources Center (library).
Testing

The testing center is located in room S116. You must provide a photo identification and know the name of your instructor to use this service.

Tutoring

The tutoring center provides tutoring on a walk-in or appointment basis in room S118. Students seeking mathematics tutoring should visit the Mathematics Enrichment Center.

Accommodations

There are accommodations available for students who need extended time on tests, note takers, readers, adaptive computer equipment, braille, enlarged print, accessible seating, sign language interpreters, books on tape, taped classroom lectures, writers, or tutoring. If you need one of these services, then you should see Learning Accommodation Services in room C148. If you request an accommodation, you will be required to provide documentation that you need that accommodation.

Online Learning

Despite the title, Online Learning provides help with much more than just your online courses. They provide technical support for students including answering questions about Canvas, myRichland, e-mail, cell phones, tablets, and laptops. They can also help troubleshoot your computer issues and make sure your computer is ready for course work.

They are located in room W143, but the best way to contact them is through the "Help" link in the lower-left corner of Canvas or at http://www.richland.edu/online/helpdesk.

Open Computer Labs

Students often wish to know where, besides the classroom, they can go to use the software. There are computers located in the Learning Resources Center and in the Academic Success Center that you may use.

College & Division Policies

Academic Dishonesty Policy

Each student is expected to be honest in his/her class work or in the submission of information to the College. Richland regards dishonesty in classroom and laboratories, on assignments and examinations, and the submission of false and misleading information to the College as a serious offense.

A student who cheats, plagiarizes, or furnishes false, misleading information to the College is
subject to disciplinary action up to and including failure of a class or suspension/expulsion from the College.

**Non-Discrimination Policy**

Richland Community College policy prohibits discrimination on the basis of race, color, religion, sex, marital or parental status, national origin or ancestry, age, mental or physical disability (except where it is a bonafide occupational qualification), sexual orientation, military status, status as a disabled or Vietnam-era veteran.

**Electronic Communication Devices Policy**

The Mathematics and Sciences Division prohibits the use of cell phones, pagers, and other non-learning electronic communication equipment within the classroom. All equipment must be turned off to avoid disturbances to the learning environment. If a student uses these devices during an examination, quiz, or any graded activity, the instructor reserves the right to issue no credit for these assignments. The instructor needs to approve any exceptions to this policy.

**Other College Services**

There are some additional services that Richland provides to its students. While they may not directly pertain to this class, you may benefit from them.

**Learning Feedback System**

At the end of each semester, students are invited to provide feedback to their instructors about the course. This includes things that went well and opportunities for improvement. This online feedback is anonymous and the instructor won't see it until grades have been turned in.

The Learning Feedback System (LFS) is primarily intended to provide feedback to the instructor. However, if you have a issues or concerns, you should not wait until the end of the semester to talk to your instructor. Please come to me at any time. The feedback system is available at https://people.richland.edu/feedback.

**myRichland**

myRichland is the student information system portal and is located at https://my.richland.edu.

You may use it to find the course schedule, register for classes, check your grades, obtain unofficial transcripts, review financial aid, and other student services.

**Library**

The Learning Resources Center (LRC) has print and electronic resources available. They offer research assistance and information literacy sessions; they also have individual and group study
Student Success Center

Temporarily located in the Workforce Development Institute (WDI) building, the Student Success Center is designed to be a one-stop shop for most student services. These include advising and registration, career services, counseling services, financial aid, veteran affairs, student records, and the transfer center.

There are a few other student services that are still in the main building. These include Campus Life, which supports new student orientation, clubs, organizations, and student leadership, and the TRiO program that offers academic and personal support to first-generation, low-income, and students with disabilities.

Directory of Student Services

The main phone number for Richland Community College is 217-875-7211. This is an automated system available 24 hours a day. If you would like to speak to an operator, then call 217-875-7200 during normal business hours.

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Richland Cross-Disciplinary Outcomes

The course objectives listed in this document make reference to these items.

1. The degree-seeking student will be able to communicate effectively (read, write, speak and listen).
2. The degree-seeking student will think critically and creatively.
3. The degree-seeking student will act professionally and responsibly.
4. The degree-seeking student will manage technology and evaluate information in various research and applied contexts.