Math 221 – Calculus & Analytic Geometry 3 Fall 2017 Course Syllabus

James Jones, Professor of Mathematics
Mathematics & Sciences Division – Richland Community College

Course Meeting Information

The Fall 2017 semester begins August 21, 2017, and concludes December 21, 2017.
MATH 221-01 meets from 11:00 am to 12:10 pm on Monday, Wednesday, and Friday in S137.
The WebAssign (https://www.webassign.net) class key for this course is: **richland 8240 3108**

Instructor Information

James Jones, Professor of Mathematics.   Phone: 875-7211, ext 6490
Email: james@richland.edu   Office: C223
Web: https://people.richland.edu/james/   WebAssign: https://www.webassign.net

Office Hours

I spend most of my office hours in the classroom, room S137. This allows me to help students with their assignments, homework, projects, exams, and questions.

- Monday: 9:00-9:30 am, 10:45-10:55 am, 12:50-1:15 pm, 2:45-2:55 pm, 4:15-4:30 pm
- Wednesday: 9:00-9:30 am, 10:45-10:55 am, 12:50-1:15 pm, 2:45-2:55 pm, 4:15-4:30 pm
- Friday: 9:00-9:30 am, 10:45-10:55 am, 12:50-1:15 pm, 2:45-2:55 pm

Students are encouraged to come to class early each day and use that time to ask questions of the instructor, work on projects, or just socialize with other students in the course.

Text

There is a textbook and an electronic homework package required for this course. The electronic package also includes an electronic version of the textbook and you do not have to buy a printed textbook if you want to go completely electronic.

- *Essential Calculus: Early Transcendentals, 2nd edition*. James Stewart. Copyright 2013, Brooks/Cole Cengage Learning. ISBN-13 978-1-133-11228-0 (Required textbook, but printed version is optional)
- *Enhanced WebAssign Homework and eBook LOE Instant Access for Multi Term Math and Science, 1st Edition*. ISBN13: 978-1-285-18421-0 (Required – can also be purchased within WebAssign)

The two items above can be bundled together for cost savings.

- *ePack: Essential Calculus: Early Transcendentals, 2nd + Enhanced WebAssign Homework and*

eBook LOE Instant Access for Multi Term Math and Science. ISBN-13: 978-1-285-94067-0 (Required)

Student Audience

Transfer students. Students pursuing degrees in engineering, mathematics, life sciences.

Prerequisite

Successful completion (C or better grade) of Math 122, Calculus and Analytic Geometry II.

Course Description

MATH 221 - Calculus and Analytic Geometry 3
Hours: 4 lecture - 0 lab - 4 credit

MATH 221 is a standard multivariable calculus course intended for students going into areas of science, technology, engineering, or mathematics. Topics covered include three-dimensional space, vectors and their operations, vector-valued functions, arc length, and curvature; partial derivatives with applications, tangent planes, directional derivatives, gradients, and optimization problems; multiple integrals with applications in rectangular, polar, cylindrical, and spherical coordinates systems. The course concludes with vector calculus, line integrals, parametric surfaces, and their applications.

Applicable toward graduation where program structure permits.

- Certificate or degree: All certificates and all degrees.
- Group requirement: Mathematics
- Area of Concentration: Not applicable.

Illinois Articulation Initiative (IAI)

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 221, Calculus & Analytic Geometry 3, satisfies the Illinois Articulation Initiative Definition of a General Education Mathematics Course. It corresponds to M1900-3, College-level Calculus III. It also corresponds to the Baccalaureate Major's Recommendation course MTH 903: Calculus III.*

M1 900-3: College-level Calculus III   MTH 903: Calculus III

Topics include (but are not limited to) the following: limits and continuity; definition of derivative: rate of change, slope; derivatives of polynomial and rational functions; the chain rule; implicit differentials; approximation by differentials; higher order derivatives; Rolle's Theorem: mean value theorem; applications of the derivative; anti-derivative; the definite integral; the fundamental theorem of calculus; area, volume, other applications of the integral; the calculus of the trigonometric functions; logarithmic and exponential functions; techniques of integration, including numerical methods; indeterminate forms: L'Hôpital's rule; improper integrals; sequences and series, convergence tests, Taylor series; functions of more than one variable, partial derivatives; the differential, directional derivatives, gradients; double and triple integrals: evaluation and applications. Prerequisite for Calculus III: Calculus II or equivalent of C or better.

> *When three courses are required to convey the necessary skills in calculus to mathematics majors, it is highly advised that students complete the entire sequence at a single institution. Course content may vary widely among institutions depending on the credits assigned to each course, and completing the sequence at a single institution is the best way to assure that neither credit nor content is lost in transfer.*

The IAI description for Calculus involves all three semesters since some schools cover the sequence in a different order. The portion of the Calculus sequence that is covered in Richland's Calculus 3 is highlighted in red.

For more information on the Illinois Articulation Initiative, visit their website at http://www.itransfer.org/

General Course Objectives

A topical outline of the content covered in the course follows this section. While learning calculus is certainly one of the goals of this course, it is not the only objective. Upon completion of this course, the student should be able to:

- demonstrate comprehension and understanding in the topics of the course through symbolic, numeric, and graphic methods.[1, 2, 3]
- demonstrate the use of proper mathematical notation.[1]
- use technology when appropriate and know the limitations of technology.[2,3]
- work with others towards the completion of a common goal.[1,4]
- use deductive reasoning and critical thinking to solve problems.[2]
- apply common sense to mathematical problems.[2]
- effectively communicate the student's understanding of the subject.[1,3]

The numbered superscripts refer to the Richland Cross-Disciplinary Outcomes addressed by that objective. A copy of the Cross-Disciplinary Outcomes can be found at the end of this syllabus.

Topical Outline

The following topical outline is an estimate of how much time will be spent on each topic and is aligned with the chapters in the textbook.

Vectors and the Geometry of Space – 16 hours

- Three-Dimensional Coordinate Systems
- Vectors
- The Dot Product
- The Cross Product
- Equations of Lines and Planes
- Cylinders and Quadric Surfaces
- Vector Functions and Space Curves
- Arc Length and Curvature
- Motion in Space: Velocity and Acceleration

Partial Derivatives – 14 hours

- Functions of Several Variables
- Limits and Continuity
- Partial Derivatives
- Tangent Planes and Linear Approximations
- The Chain Rule

- Directional Derivatives and the Gradient Vector
- Maximum and Minimum Values
- Lagrange Multipliers

Multiple Integrals – 15 hours

- Double Integrals over Rectangles
- Double Integrals over General Regions
- Double Integrals in Polar Coordinates
- Applications of Double Integrals
- Triple Integrals
- Triple Integrals in Cylindrical Coordinates
- Triple Integrals in Spherical Coordinates
- Change of Variables in Multiple Integrals

Vector Calculus – 15 hours

- Vector Fields
- Line Integrals
- The Fundamental Theorem for Line Integrals
- Green's Theorem
- Curl and Divergence
- Parametric Surfaces and Their Areas
- Surface Integrals
- Stokes' Theorem
- The Divergence Theorem

Type of Instruction

Instruction will occur through discussion, problem solving, student questions, student participation, oral presentations, quizzing, and lecture. Students are expected to read the material before coming to class and are strongly encouraged to come to class with a list of questions and to ask these questions.

Method of Evaluation

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

The final weighting of grades will be decided upon by the class, subject to the following guidelines:

- No more than 40% of your grade may come from homework.

- No more than 15% of your grade may come from activities and quizzes.
- No more than 15% of your grade may come from projects.
- At least 40% of your grade must be from exams.

Homework

Practice is essential for mastery of the material and homework is the primary means of practice.

The lowest three (3) homework grades for each student will be dropped from the gradebook.

WebAssign (computer)

WebAssign is a software package that is designed to be a homework and testing framework. It also provides access to an electronic version of the textbook.

For each section in the textbook, there is an accompanying homework assignment in WebAssign. These assignments cover all of the topics from the section and should take about 90 minutes to complete.

Here is a summary of the homework settings in effect for most of the questions. A few questions may use different settings.

- You get six attempts to answer most questions. This will not be the case when there is no randomization involved in the questions.
- If the problem uses randomized values, then you will be shown the correct answer after 3 attempts and be given a similar problem with different values.
- You may submit individual questions for grading rather than waiting to complete the entire assignment. You may also save your answers without using a submission attempt.
- The best score on individual parts of a question is used rather than on the entire question.
- Each question is typically worth 1 point, regardless of the number of parts involved.
- Homework is due before we cover it in class. I want you to read and attempt the section before coming to class so that you have an idea what we're talking about and we can focus more on concepts.
- Homework done before it is due is awarded a 15% bonus.
- In order to complete homework after the due date, you must request an automatic extension, which will give you an additional 5 days to complete the homework. That request for an extension must be made within 7 days of the original due date. There is no real penalty for working homework after the due date, you just don't get the 15% bonus for doing it early.
- Extensions do not give you extra attempts to complete the questions, they just give you more time to complete the attempts you have left. If you have already used your six attempts, requesting an extension won't have any benefit.

Activities and Quizzes

Activities and quizzes take place in class and may not be made up if you are absent during the activity or quiz. The three (3) lowest quizzes or activities will be dropped from the gradebook to allow for absences, bad days, life emergencies, etc.

Activities

Much of the learning in the classroom is done using collaborative learning and group projects. Many sections will have an activity sheet designed to help you learn and more deeply understand the material than the traditional homework problems. At times, everyone will go to the board to work a problem in small groups so that I can see how you're doing.

Some of these activities are instructional in nature and not graded directly. However, the instructor will be observing the group dynamics during these activities to see who participates, who leads, who contributes, and who just lets the others do the work.

Other activities, loosely defined to be something we do in class, may be for a grade.

Quizzes

You are expected to read through the material in a section before coming to class. You do not have to understand all of it, but there should be a basic level of familiarity before class because a large portion of class time will be spent working on conceptual understanding, not basic skills.

These quizzes are mainly designed to encourage reading of the material before the section is covered in class. The questions are picked so that a student with a medium level of understanding of the section should be able to answer them.

These are typically given at the beginning of class when we start a new section and cannot be made up if you are not present. Not every section will have a quiz and sometimes we may skip planned quizzes because of time constraints.

Technology Projects

The appropriate use of technology is becoming more and more important. This class strives to reach a balance between conceptual understanding, memorization, hand calculations, and the use of technology.

Towards that end, there is a project for each chapter that will involve the use of technology. It may be as simple as taking some problems and learning how they can be done on the computer so you learn how to use the software. In other cases it involves taking more complicated problems using real-life data and ugly answers that don't work out nice when you do them by hand.

These projects are group projects and are due the day of the exam. Group assignments will be

made before the we cover the material on the project and will be based on students in attendance when the groups are assigned.

In many cases, material on the exam may relate to concepts learned on the technology projects. For this reason, each student should understand all of the problems on the technology projects. The temptation in group projects like this is to divide the project and assign each member a portion to complete. While this may seem like a good idea, it will hurt you when it comes to the exam as each student needs to know all of the material contained in the projects, not just 1/3 of the material.

Your work will be graded holistically based on the quality and quantity of the work and explanations provided.

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

Chapter Exams

WebAssign homework is designed to measure your mastery of skills. In contrast, exams will measure a combination of skills and understanding, with more emphasis on the understanding.

The in-class exams in this course generally have limited numbers of basic skills questions on them. That is, there are limited amounts of straight-forward "differentiate this" or "integrate this" type problems. That has been pushed off onto the WebAssign portion of your grade.

What you will find on the in-class exams are a few problems that get at how deeply you *understand* the concepts rather than a lot of problems that assess how well you have memorized how to work a particular type of question. The questions will often be similar to ones encountered in the group activities or on the technology projects, or they might be items you've never seen before but you should be able to figure out with the information you have seen.

Missed Exams

If you are unable to complete the exam with the rest of the class on the day it is scheduled, then the instructor will place your exam in the testing center and you will have until the start of the 2nd class period after the scheduled exam to complete the test. That is, you are allowed one class meeting after the scheduled date, but you must have it completed before the second class

meeting after the scheduled date begins. Failure to complete the exam before the beginning of the second class period will result in a zero for the grade

That paragraph is a little confusing, so here are some examples. All assume that the class meets Monday, Wednesday, and Friday:

- A test is scheduled for Friday. The next class meeting is on Monday and you have until the start of Wednesday's class to complete the exam.
- A test is scheduled for Monday, but there the college is closed on Wednesday. Friday's class would be the first one after the exam and so you must have it completed by the following Monday's class begins.

This two-class limit is so that other students in the class start won't suffer from not getting their tests back in a timely fashion. It is also to keep you from falling further behind in the class.

Note that testing center is open limited hours: 8:00 am to 7:00 pm on Monday and Thursday, and 8:00 am to 5:00 pm on Tuesday, Wednesday, and Friday. The testing center is not open on Sundays, holidays, days when there are no classes, and most Saturdays. The times listed here are subject to change and not binding on the testing center, so you should check with the testing center to confirm their hours.

You will need to bring a photo identification with you when you come to take the exam.

Absolutely no late work will be accepted after the final exam, so the last in-class exam must be taken as scheduled with the rest of the class.

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 integer, so an 89.5% will be considered an "A".

All grading are subject to audit and revision if mistakes are found.

Consideration may be given to such qualities as attendance, class participation, attentiveness, attitude in class, and cooperation to produce the maximum learning situation for everyone.

The gradebook for the course will be kept inside WebAssign. When you look at your grades in WebAssign, 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.

If you are concerned about your grades, see the instructor.

The final weighting of grades will be decided upon by the class. Details on each of the methods of evaluation are available in the syllabus and there will be a separate handout repeating some of that information.

Assignments are due at the beginning of the class period on the date they are due. The instructor may be gracious and allow you to turn them in later that day without counting them late, but do not count on his graciousness.

Late Work

This is a summary of information found in other parts of the syllabus. For more information, look in those sections.

- Activities and Quizzes are conducted in class and may not be made up if you are absent during the activity or quiz. The three (3) lowest assignments in this category will be dropped.
- WebAssign homework is due before we cover the material in class and gets a 15% bonus if it is done before then. Late work is not penalized, but you must ask WebAssign for an extension of 5 days to continue working on it. That extension must be made within 7 days of the original due date. Make sure you have time to work on the homework before requesting an extension. The lowest three (3) homework grades will be dropped.
- Technology Projects are due at the beginning of class on the day of the exam. They are graded holistically and lateness may factor into the overall grade.
- Chapter Exams will be placed in the testing center for anyone missing the scheduled day of the exam. You have until the start of the second class period after the scheduled exam to complete the test. If you complete it before the start of the second class period following the exam, then there is no penalty for being late. If you fail to complete the exam before the start of the second class period following the exam, then you will get a zero (0) for the exam.

Absolutely no late work will be accepted after the final.

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 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.

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, the student should notify the instructor by email. In extreme circumstances, you can leave a voice message, but I generally will not get those in a timely fashion. If you do leave a voice message, be sure to follow up with an email.

If you are going to miss an exam, you may choose to take it early. However, if you do not show up on the day of an exam, then I will automatically place your test in the testing center and then you have until the start of the second class period after the scheduled exam to make it up. You do not need to contact the instructor for this to happen. However, if you know that you are going to miss an exam and the days following the exam, then you will definitely want to talk to the instructor to take the exam early.

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 Calculus, 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). There may be some projects, homework, or portions of a test that require you to use technology to complete.

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

WebAssign

WebAssign is an online homework and grading system. Stewart's Calculus text is available in WebAssign as an enhanced electronic version. The full text of the book is there as well as tutorials, videos, and explorations. WebAssign is available at https://www.webassign.net/

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.

You may use a graphing calculator from another company like Casio, but you will be responsible for figuring out how to use it.

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

Microsoft Excel

This spreadsheet application is useful for numerical methods such as Newton's Method, the Trapezoid Rule, Simpson's Rule, and Euler's Method. Microsoft Excel is part of Microsoft Office, which is loaded on all of the student computers at Richland. Current Richland students can obtain Microsoft Office without additional charge as part of the Microsoft Student Advantage program. For more information on obtaining Microsoft Office, log into MyRichland and look for Microsoft Advantage or visit the or site directly at https://jics.richland.edu/MicrosoftStudentAdvantage/

Maxima

Maxima is an open-source computer algebra system that is free for you to download and use at home. It is available for Windows, Mac, Linux, and Android at 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

DPGraph

DPGraph is a 3D graphing package, written by David Parker, that will be useful for visualizing the graphs of multi-variable functions. The software is not free, but Richland has a site license that allows students to download and use it without additional charge. You may download it from http://www.dpgraph.com/graphing-users.html (be sure to find the entry for Richland Community College)

CalcPlot3D

This is an online 3D graphing calculator Java applet written by Paul Seeburger at Monroe

Community College in Rochester, NY. It allows you to visualize vectors, space curves, surfaces, normal lines, tangent planes, and contour plots. It is available online at http://web.monroecc.edu/calcNSF/

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 areas.

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 or 217-875-7200. This is an automated system available 24 hours a day.

Student Service	Location	Extension
Accommodations	C148	6379
Advising and Registration	WDI	6267
Campus Life	C131	6243
Career Services	WDI	6305, 6243
Counseling Services	WDI	6252
Financial Aid and Veteran Affairs	WDI	6274
Library	C152	6303
Online Learning Support	W143	6376
Mathematics Enrichment Center	W117	6383
Student Employment	WDI	6205
Student Records	WDI	6257
Student Support Services/TRiO Program	C143	6440
Testing	S116	6238
Transfer Center	WDI	6222
Tutoring	S118	6419
Veteran Services	WDI	6307, 6205

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.