



Calculus II

MAT 154.11

Summer 2021

Number of Credits: 5

Days Class Meets: 2

Meeting Times: Tues & Thurs, 9-11:30 AM

Location/Venue: [Zoom](#)

Instructor: Alana Tuckey

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Contact Email: tuckeyalanaj@jccmi.edu

Online Office Hours: Tuesdays & Thursdays, 12:00pm-4pm

Course Description

This course explores the following topics: methods and applications of the derivative and integral for inverse trigonometric and hyperbolic functions, indeterminate forms, series and polar/parametric representations of functions. Graphing calculator required. The mathematics department recommends the prerequisite not be more than two years old. If the prerequisite is more than two years old, the recommendation is the course placement exam be taken or the prerequisite be retaken to ensure the success of the student.

Prerequisite(s)

An earned grade of > 2.0 in JC's MAT 151, course placement, or instructor approval.

Course Goals

Insert an overview of the course direction, orientation or purpose. Description of student activities, the amount and relative difficulty of reading assignments, or the level of skill required of enrolling students are issues that can be included in this section.

Course Objectives

The course goals and objectives incorporate specific General Education Outcomes (GEOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges and universities and reflect input from the professional communities we serve. GEOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The GEOs and course objectives addressed in this class include the following:

Math 154 General Education Outcome = GEO 3

Demonstrate Computational Skills and Mathematical Reasoning

Course Objectives: Upon successful completion of MAT 154, students should be able to:

1. Apply calculus to standard applications. Applications may include volumes of solids of revolution, arc length, work, force, centroids, and differential equations.
2. Understand multiple techniques for integration including: substitution, tables, integration by parts, partial fractions, and trigonometric substitution.
3. Understand sequences and series; identify, manipulate, and test the convergence of various series including geometric, arithmetic, p-series, alternating, power, Taylor, and Maclaurin.
4. Perform calculus in polar coordinates and with parametric equations.
5. Apply appropriate technology in all of the above areas.

Required Materials (part of [Follett Access](#))

- MAT 154 Coursepack SP21
- MyMathLab (“MML”) See [THIS HANDOUT](#)
- **Optional Textbook:** *Calculus (Early Transcendentals)*, 3rd Edition; by Briggs, Cochrane, Gillett (ISBN 13: 978-0-13-476364-4). **Textbook Zero Note:** This textbook is available online within MyMathLab.

Required Materials (NOT part of [Follett Access](#))

- Computer with **webcam**, **microphone**, and consistent **internet access** (webcam may be external)
- **Scan-to-PDF Technology:** Free mobile app or stand-alone scanner for submitting PDF files. (Some potential apps: [Notes](#), [Adobe Scan](#), [CamScanner](#), [Genius Scan](#), [Office Lens](#), etc.)
- 3-Ring Binder, Pencils, Pens, Highlighters, Erasers, Ruler/Straight Edge, White Board, White Board Markers, White Board Erasers

Follett Access

- Please [review the cost of your required materials](#) to determine the best option for you to purchase your materials.
- For more information on the Follett ACCESS Program, you can view the [view the frequently asked questions](#).

Grading Scale

GPA	GRADE RANGE	GRADE CALCULATION
4.0	94-100%	
3.5	89-93%	MyMathLab Homework = 10%
3.0	84-88%	Classwork & Homework = 30%
2.5	78-83%	Midterm Exams = 36%
2.0	72-77%	Final Exam = 24%
1.5	66-71%	
1.0	60-65%	
0.5	55-59%	
0.0	0-54%	

Grading Procedure

Category #1: MyMathLab (MML) Homework: There will be a homework assignment for each section of the course. **MML homework assignments have unlimited attempts before you submit them.** Thus it is possible to receive full credit, if you keep trying until you get a perfect score. **Remember** you can use MAPLE as you work through all assignments.

Category #2: Classwork and Homework: There will be frequent partner and group-based in-class activities and assignments. These may be scored for credit (participation, correctness or both). These may be individual or group assignments. Students may be able to choose their own partner/group or may have a partner/group assigned by the instructor.

Categories #3 & #4: Midterm & Final Exams

- **Proctoring:** All exams will be proctored. This involves being monitored via web camera as well as possibly screen-sharing and/or scanning your environment during the exam.
- **Note Sheets:** You will be able to use the “Exam Notes Packet” from the coursepack during any proctored Exams. After exam 1, you will also be able to use the “Full Integration Table” during exams.
- **Timing for Proctored Exams**
 - You will have the opportunity to take any proctored exams during a normal class session, or you can make other arrangements directly with your instructor.
 - The Final Exam is during the last week of the course and cannot be taken early so do NOT schedule travel plans during that week or you will receive a ZERO on the final.
 - Exams not taken by the due date will receive a grade of zero except under extreme, well-documented circumstances arranged *in advance* of the due date with the instructor.

Absence Policy

If absence is unavoidable the student is responsible for doing the following:

1. Contact your instructor regarding your absence as soon as possible to find out what you missed and what you need to do before the next class. (Having a peer contact in the class is very helpful for finding out this information as well!!)
2. Watch the recording of class – if available
3. Turn in all assignments that were given in class as well as those that were due as “homework” on time.
4. Please remember that office hours are not a replacement for class time.

Academic Honesty Policy

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism

Plagiarism is defined as the failure to give credit for the use of material from outside sources. Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating

Cheating is defined as obtaining answers/material from an outside source without authorization. Cheating includes, but is not limited to:

- Plagiarizing in any form
- Using notes/books/electronic material without authorization
- Copying
- Submitting others' work as your own or submitting your work for others
- Altering graded work
- Falsifying data
- Exhibiting other behaviors generally considered unethical

- Allowing your work to be submitted by others

Please note: Students that do the following are considered to be in violation of JC's [Academic Honesty Policy](#) and [consequences](#) will follow.

- Posting course materials to sites such as Chegg or CourseHero is considered academically dishonest. If the MAT 154 materials are posted there, I will ask the Dean's office to [request the student's personal information](#) from the site.
- MAT 154 answers or solutions that are found from computer programs, unless specifically allowed.

Accessibility

Jackson College understands that cultivating a broadly diverse community is crucial to our educational mission and to our foundational commitment to leadership and service. Jackson College is fully committed to ensuring our courses are accessible to everyone including those with disabilities. We are currently working to increase accessibility and usability of our course materials in order to meet or exceed the requirements of Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1991 and Web Content Accessibility Guidelines (WCAG) 2.0. For more information about Jackson College's efforts to ensure accessibility please visit the [Jackson College accessibility web page](#).

If you have an accessibility need in any of our classes please e-mail the Center for Student Success at JCCSS@jccmi.edu or visit the [Center for Student Success web page](#).

At the Center for Student Success (CSS), we are committed to providing all students the opportunity to achieve academic success by providing a variety of support services free of charge to Jackson College students. This includes, but is not limited to, peer and faculty tutoring, mental health referral, temporary assistance with transportation, various workshops/seminars, and the TRIO program.

In addition, the CSS staff is committed to adapting the College's general services to meet the individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs and facilities.

Incomplete Policy

A student may request an incomplete from the instructor, who will follow the JC Incomplete Policy. An incomplete may be granted only if the student can provide documentation that his or her work up to that point is sufficient in quality, but lacking in quantity, due to circumstances beyond the student's control. Furthermore, a written plan for making up the missing work within one semester must be completed by the student. Final determination of whether an incomplete will be given is the instructor's decision. Note: An "Incomplete" grade is not a way to avoid a failing one.

Extra Credit Policy

There will be no opportunities for extra credit. Your grade calculation is based solely on your performance on course assignments listed above.

Classroom Behavior Policy

***"We know what a person thinks not when he tells us what he thinks, but by his actions."* - Issac B. Singer**

We are each responsible for our work, our learning, and the consistency of our performances.

The regular in-class collaborations, online homework, and examinations will require consistent effort on your part. Generally speaking, mathematics is much like a foreign language – it requires regular effort and consistent practice to understand and master.

We are each respectful of everyone in the class (including ourselves).

Please silence mobile phones and other electronic devices, refrain from using any tobacco products, and come prepared (and on time) to work together and ask/answer questions.

We will communicate with each other promptly regarding problems or concerns.

Regular, direct communication solves many more problems than it causes. Please do not hesitate to contact me for any reason, and I will do the same with you.

Where to Get Help

Your fellow students and I are your best, most immediate resources for learning. Even so, there are many other sources to consider and investigate. Be creative, be resourceful, and share what you find -- we're all in this together! I strongly suggest you start up a regular study group as soon as you are able with some of your classmates. For more information on starting and maintaining a study group, check out the following link: <http://bit.ly/math-study-group>

Other sources of help:

- **Office Hours:** Meet with me during office hours.
- **Jackson College's Center for Student Success (CSS):** Free online tutoring in is available at <http://www.jccmi.edu/Success/Tutor/>.
- **YouTube Videos:** Lead Faculty Alana Tuckey has created hundreds of videos showing for this course including lectures, calculator tutorials, and more. Go to: <http://www.youtube.com/user/tuckeyalanaj> and check out any 251 playlists.
- **MyMathLab:** There are videos, extra problems, sample exams, lecture notes, PowerPoint lectures and more available in MyMathLab. It's a great resource! In particular, the **Study Plan** in MyMathLab can help with studying for exams as it gives you unlimited extra problems to do for practice.

Academic Advising

It is important to contact a Center for Student Success professional prior to the start of the semester in order to receive accommodations in a timely manner. While we will make every effort to coordinate accommodations in a timely manner, failure to self-identify prior to the start of the semester may delay notification to instructors and timeliness of acquiring accommodations. Accommodations do not

automatically carry over to the next semester. Please e-mail JCCSS@jccmi.edu or visit the [Accommodations for Students with Disabilities](#) web page

Attendance- Participation Policy

Just as in a traditional classroom course, regular class participation and keeping up with assignments **is required**. It is my experience that students that regularly attend and participate in synchronous class sessions are significantly more successful in the course. Therefore, students are expected to attend and participate fully in all class meetings whenever possible, arriving on time and staying until the end.

Participation in the live class sessions may require:

1. Showing your face via webcam (particularly during proctored exams)
2. Talking and working with others (including your instructor) through an online platform (such as Zoom or BigBlueButton) in both whole class sessions and “breakout” rooms.
3. Contributing to class and group discussions
4. Sharing your screen and/or work with your groupmates and/or the class.

In compliance with Federal Title IV funding requirements, as well as college initiatives, I will be monitoring student participation on a regular basis and officially reporting student activity throughout the term to assure compliance with college policy and federal regulations. It is imperative that you log in to the course and actively participate *within the first couple of days of the term* to validate your enrollment in the course. After that, not actively participating in class may result in you being withdrawn from the course. Being withdrawn from a course can have an impact on financial aid, billing, athletic eligibility, and housing status. As a college student you are responsible for how your participation impacts your academic progress; the accountability lies with you.

Caveat

Students are advised that some revisions to this syllabus may be necessary during the course due to school closing policies, instructor illness and other procedural improbabilities.

Calendar

*Calendar dates are an approximation and are subject to change

Class Day	In-Class Date 9-11:30 AM	In-Class Activities (Zoom or BBB)	Assignments to Complete (More may be added in class)
1	Tuesday, May 11	Course Intro	Due 5/13 by 9:00 AM: Welcome Survey Log Onto REMIND 6.0, 6.1 Lecture Notes
2	Thursday, May 13	Q&A Section 6.0, 6.1	Due 5/18 by 9:00 AM: 6.0, 6.1 Worksheets 6.2, 6.3 Lecture Notes MML HW 6.0, 6.1
3	Tuesday, May 18	Q&A Sections 6.2, 6.3	Due 5/20 by 9:00 AM: 6.2, 6.3 Worksheets 6.4, 6.5 Lecture Notes
4	Thursday, May 20	Q&A Sections 6.4, 6.5	Due 5/25 by 9:00 AM: 6.4, 6.5 Worksheets 6.6, 6.7 Lecture Notes MML HW 6.2, 6.3, 6.4, 6.5
5	Tuesday, May 25	Q&A Sections 6.6, 6.7	Due 5/27 by 9:00 AM: 6.6, 6.7 Worksheets 7.1, 7.2 Lecture Notes
6	Thursday, May 27	Q&A Section 7.1, 7.2	Due 6/1 by 9:00 AM: 7.1, 7.2 Worksheets 7.3 Lecture Notes MML HW 6.6, 6.7, 7.1, 7.2
7	Tuesday, June 1	Q&A Section 7.3 Review for Exam 1	Due 6/3 by 9:00 AM: 7.3 Worksheet MML HW 7.3 Sample Exam 1
8	Thursday, June 3	Exam 1 proctored DURING class	Due 6/8 by 9:00 AM: 8.1, 8.2 Lecture Notes

Class Day	In-Class Date 9-11:30 AM	In-Class Activities (Zoom or BBB)	Assignments to Complete (More may be added in class)
9	Tuesday, June 8	Q&A Sections 8.1, 8.2	Due 6/10 by 9:00 AM: 8.1, 8.2 Worksheets 8.3, 8.4 Lecture Notes
10	Thursday, June 10	Q&A Section 8.3, 8.4	Due 6/15 by 9:00 AM: 8.3, 8.4 Worksheets 8.5, 8.6 Lecture Notes MML HW 8.1, 8.2, 8.3, 8.4
11	Tuesday, June 15	Q&A Sections 8.5, 8.6	Due 6/17 by 9:00 AM: 8.5, 8.6 Worksheets 8.7, 4.7 Lecture Notes
12	Thursday, June 17	Q&A Sections 8.7, 4.7	Due 6/22 by 9:00 AM: 8.7, 4.7 Worksheets 8.9 Lecture Notes MML HW 8.5, 8.6, 8.7, 4.7
13	Tuesday, June 22	Q&A Sections 8.9 Review for Exam 2	Due 6/24 by 9:00 AM: 8.9 Worksheet MML HW 8.9 Sample Exam 2
14	Thursday, June 24	Exam 2 proctored DURING class	Due 6/29 by 9:00 AM: 10.1, 10.2 Lecture Notes
15	Tuesday, June 29	Q&A Sections 10.1, 10.2	Due 7/1 by 9:00 AM: 10.1, 10.2 Worksheets 10.3, 10.4 Lecture Notes
16	Thursday, July 1	Q&A Sections 10.3, 10.4	Due 7/6 by 9:00 AM: 10.3, 10.4 Worksheets 10.5, 10.6 Lecture Notes MML HW 10.1, 10.2, 10.3, 10.4
17	Tuesday, July 6	Q&A Sections 10.5, 10.6	Due 7/8 by 9:00 AM: 10.5, 10.6 Worksheets 10.7, 10.8 Lecture Notes
18	Thursday, July 8	Q&A Sections: 10.7, 10.8	Due 7/13 by 9:00 AM: 10.7, 10.8 Worksheets 11.1, 11.2 Lecture Notes MML HW 10.5, 10.6, 10.7, 10.8
19	Tuesday, July 13	Q&A Sections: 11.1, 11.2	Due 7/15 by 9:00 AM: 11.1, 11.2 Worksheets 11.3 Lecture Notes
20	Thursday, July 15	Q&A Sections: 11.3 Review for Exam 3	Due 7/20 by 9:00 AM: 11.3 Worksheet Sample Exam 3 MML HW 11.1, 11.2, 11.3

Class Day	In-Class Date 9-11:30 AM	In-Class Activities (Zoom or BBB)	Assignments to Complete
21	Tuesday, July 20	Exam 3 Proctored DURING Class	Due 7/22 by 9:00 AM: 12.1 Lecture Notes
22	Thursday, July 22	Q&A Sections: 12.1	Due 7/29 by 11:59 PM: 12.1 Worksheets 12.2, 12.3 Lecture Notes MML HW 12.1
23	Tuesday, July 27	Q&A Sections: 12.2, 12.3	Due 8/3 by 11:59 PM: 12.2, 12.3 Worksheets 9.1, 9.2 Lecture Notes
24	Thursday, July 29	Q&A Sections 9.1, 9.2	Due 8/5 by 11:59 PM: 12.2, 12.3 Worksheets 9.1, 9.2 Lecture Notes MML HW: 12.2, 12.3, 9.1, 9.2
25	Tuesday, August 3	Q&A Sections 9.3 Review for Final Exam	Due 8/10 by 11:59 PM: 9.3 Worksheet Sample Exam 4 MML HW: 9.3
26	Thursday, August 5	Final Exam proctored DURING class	