Course Information Sheet

Spring 2021-2022 (2215) Project-Based Calculus II

http://people.rit.edu/jdd5747

Course Title: Project-Based Calculus II

Course Identifiers: MATH-182-14 Class number 53606

Room: BOO-1440

Class Times: Mondays, Wednesdays, and Fridays from 12:00 pm to 1:50 pm.

Instructor: Dr. Joel Dreibelbis

GOS-2254 Office: (585) 475-6409

Office Hours: In person at GOS-2254 – Mon, Wed, and Friday from 11 am to 11:50 am.

Online in Zoom – Friday from 9 am to 9:50 am by appointment/request.

Contact Info: jdd5747@rit.edu Slack workspace, RIT-MATH-182-914-2215

Web: http://people.rit.edu/jdd5747

Text: Stewart. Calculus, Early Transcendentals. 8th edition.

Course This is the second in a two-course sequence intended for students majoring in Description:

mathematics, science, or engineering. It emphasizes the understanding of concepts, and using them to solve physical problems. The course covers techniques of integration including integration by parts, partial fractions, improper integrals, applications of integration, representing functions by infinite series, convergence and divergence of series, parametric curves, and

polar coordinates.

(C- or better in COS-MATH-181). Class 4, Workshop 2, Credit 4 (F, S)

Official course outline with course objectives and more detailed information: Please login to myCourses to view this document (under the syllabus).

Prerequisite: C- or better in COS-MATH-181.

Corequisite: None.

Grading: 20% (1% each of highest 20). Homework (20-24)

> Workshops (20–28) 10% (0.5% each of highest 20).

> Project 5%.

> Exams (4)40% (10% each).

> Final Exam 25%.

Final Grades: $(G,P) \longrightarrow \text{The minimum course average to guarantee a grade of } G \text{ is } P\%.$

> (A, 93)(A-, 90)(B+, 87)(B, 83)(B-, 80)

> (C, 73)(C-, 70)(C+, 77)(D, 60)(F,0)

A course average less than 59.5% will likely result in an F.

The decision about whether to upwardly refine a grade rests with the instructor and will be informed by the body of your work, including attendance and trends

in your performance throughout the term.

Spring 2021-2022 (2215)

Project-Based Calculus II

Homework:

We will use a free, online homework system called Webwork. The homework assignments will be assigned roughly once per week and you will have at least 5 days to complete the assignment. Please be aware (especially if you print out the homework) that the due dates may change slightly as we near the original due date (the due dates would only be pushed back by a few hours or days). You must login to Webwork to see the current due date for an assignment.

To login, use your RIT username and password. If you cannot login, please send me an e-mail. https://webwork.rit.edu/webwork2/MATH-182-09_14/

Workshops:

Workshop attendance and participation is mandatory. If you have four or more unexcused absences from workshops then, by departmental policy, the highest grade you can receive is a C+. If you feel your absence is excusable, you must notify me within one week of the absence. You will be working in groups of 3, 4, or 5 on problem sets. It is expected that group members work together on the problems and then submit one copy of the assignment at the end of class. Points will be deducted if groups adopt a "divide and conquer" tactic to completing the assignment. It is much better for groups to work together and solve fewer problems rather than complete the entire assignment by having group members work independently. These workshops will be held on Mondays and Wednesdays from 1:00 pm to 1:50 pm. Half of your grade on the workshops will be your participation level and the other half of your grade will be the quality of work on problems completed. Both excused and unexcused workshop absences will result in a 0 for that missed workshop.

At least initially, these groups will be randomly assigned. Additional information on the workshops will be posted in myCourses under Announcements.

Project:

The project will consist of three parts (each with their own due date). Part 1 of the project will likely be published around week 3 and due around week 5. Parts 2 and 3 will be subsequently be assigned so that part 3 is due around week 15. All parts of the project will have a written component consisting of 1 to 3 pages on average.

Exams: There will be 4 exams that are expected to be held during weeks 4, 8, 12, and 15.

Final Exam: The final exam will be cumulative.

Academic Honesty:

I strictly adhere to the academic dishonesty policy which can be viewed at: https://www.rit.edu/academicaffairs/policiesmanual/d080

Attendance Policy:

Attendance is mandatory. If you have four or more **unexcused** absences then by departmental policy the highest grade you can receive is a C+. If you feel your absence is excusable, you must notify me within one week of the absence. Attendance will be measured weekly – you must satisfy AT LEAST TWO of the following items to have been deemed "attended" for the week.

- 1) Physical attendance on Friday.
- 2) Virtual (online) attendance by receiving $\geq 50\%$ on both workshops.
- 3) Mastery of the weekly homework(s) by receiving $\geq 75\%$.

 Note: If you cannot physically attend for any reason, then please complete items 2 and 3. Also, for those in quarantine or isolation (per official notification from

RIT), these requirements are waived and you will be considered "attended" for those weeks.

Behavior Expectations:

We will strive for a professional atmosphere in the classroom. As such, I will start classes promptly at 12:00 pm, have my cell phone silenced or off, and will treat everyone with respect. I have similar expectations for you – please turn off/silence all electronic devices, do not talk to other students in class while I am presenting material, leave the room as necessary in a quiet manner, raise your hand to ask questions, and be respectful of other students.

Calculator Policy:

Calculators are not allowed on any test (exam or final exam). You may use calculators on the homework and workshops. Whenever possible, try to solve problems without a calculator in preparation for upcoming tests. Occasionally, a calculator may be needed on a homework problem (or workshop) but the tests will be designed so that they may be completed without a calculator.

Make-up Policy:

Late homework will be accepted (though you must request the missed homework to be reopened). However, your score on the late homework will be multiplied by 0.97^d and by 0.8^{n-1} where d is the number of days late and n is the number of late homeworks. For example, a late homework originally scored as a 92% but was 5 days late and was the 2nd missed homework would be recorded as a $63.2\% = 92\% \times 0.97^5 \times 0.8^{2-1}$.

There are no make-ups on the first four workshops since your lowest four workshops will be dropped.

A make-up will be given on the first missed exam. If possible, please contact me in advance of the exam in the event of a planned absence or coordinate with me within 5 days of the exam date. No make-up will be given for the second missed exam, but the final exam percent score will replace your percent score on the second missed exam.

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Withdrawal: The last day to withdrawal from this course is April 1st.

Accommodations: Students with disabilities may be eligible for accommodations, such as extra time

during exams, notetakers, etc. To receive these accommodations, I need a

"Disabilities Services Agreement" letter from the Disability Services Office (SAU-1150).

Free Help: In addition to my office hours, there are two free tutoring resources on campus. The Sol

Study Center in Sol Heumann Residence Hall is mostly staffed with students. The Bates Study Center in Gosnell Hall is staffed with both students and professors. At each center, you can drop in and receive help.

Google/Bing: ''rit math tutoring''

Sol Study Center: SHH-1016 Bates Study Center: GOS-1200

Schedule:	Week	Wednesday	Sections Covered	Remarks
	1	1/12	5.5, 6.1	
	2	1/19	7.1	No class on $1/17$
	3	1/26	7.7, 7.4	
	4	2/2	6.2, 6.3	Exam 1, $2/4$
	5	2/9	7.2, 7.3	
	6	2/16	8.1, 8.3	
	7	2/23	6.5, 7.8	
	8	3/2	11.1, 11.2	Exam $2, 3/4$
	9	3/9		No classes (spring break)
	10	3/16	11.3, 11.4	
	11	3/23	11.5, 11.6	
	12	3/30	11.8, 11.9	Exam $3, 4/1$
	13	4/6	11.10	
	14	4/13	10.1, 10.2	
	15	4/20	10.3, 10.4	Exam $4, 4/22$
	16	4/27		Last class on $4/25$
	17	5/4		Final Exam, $4/27$

Note: 1) Exam dates may move forward or backward by up to one week. Exam dates will be announced at least one week before in myCourses.

- 2) Class is also held on Mondays and Fridays (though their dates are not shown).
- 3) Course materials Since homework is assigned through the free, online homework program Webwork, the textbook is optional. We will not use the textbook directly in class or workshop but the lecture and workshop will be closely modeled after the textbook.
- 4) MyCourses will be used for posting class announcements, handouts, and your grades. https://mycourses.rit.edu/