

CALCULUS AND ANALYTICAL GEOMETRY II

SYLLABUS

Spring 2021

Subhadip Chowdhury

Math 112

Course Info

- **Section 01:** MWF 8:00 am - 8:50 am, T 8:00 am - 9:20 am (EST)
- **Section 02:** MWF 9:15 am - 10:05 am, T 9:45 am - 11:05 am (EST)

Instructor Info

- **Instructor:** Subhadip Chowdhury
- **Email:** schowdhury@wooster.edu
- **Office:** Taylor 307
- **Office Hours:** Online, see [📅 Bookings page](#).

Zone Interns

- **Sec 01:** Melita Wiles (mwiles22@wooster.edu)
- **Office Hours:** Wednesday 8-10PM
- **Sec 02:** Lucy Wickham (lwickham23@wooster.edu)
- **Office Hours:** Thursday 8-10PM

§A. Pre-Requisites

This course is a continuation of MATH 111 - Calculus I. A grade of C- or better in 111 or 108 is required for this course, or an AP/equivalent credit. A firm understanding of algebra, trigonometry, and Calculus I topics (differentiation, integration, the Fundamental Theorem of Calculus) is required. If you have any concerns regarding your preparedness level for this course, please do not hesitate to speak with me.

§B. Learning Goals

MATH 112 SPECIFIC GOALS

The overall goal of the course is for students to develop an understanding of different integration techniques, an ability to apply Integral Calculus in a variety of real-life situations and, learn about Sequences and Series. By the end of the course, you will be able to

- Define, compute, and interpret a definite integral.
- State, explain, and apply the fundamental theorem of calculus.
- Perform techniques of integration, including u-substitution, integration by parts, and trigonometric substitutions.
- Recognize and compute improper integrals.
- Apply integrals to concepts such as area, volume, arc length, mass, work, and energy. Interpret a real-world phenomenon as a differential equation and solve it using analytical techniques.
- Manipulate infinite sequences and series.
- Apply tests of convergence and divergence.
- Find the interval of convergence for power series, manipulate power series within their intervals of convergence, and represent analytic functions as a Taylor series.

- Describe fundamentals of multivariable calculus ideas such as partial derivatives and volume integration.

LIFELONG SKILLS

Here are some big picture goals I have for you over the course of the semester. I am also always interested in any additional goals you have for yourself and how I can help you meet those.

- Students will successfully communicate mathematics through reading, writing, and speaking.
- Students will value peer collaboration and group learning while continuing to maintain a sense of self-motivation and personal understanding.
- Students will work to solve difficult problems and value the process of figuring them out, rather than just searching for “the answer.”
- We will all have FUN learning calculus together!

§C. Required Materials


TEXTBOOK

There is no one specific textbook for this course. We will be mostly following the materials from the following two open source **free** online Calculus books.

- **Calculus - Volume 2** by OpenStax. You can view a pdf or interactive E-Book here: <https://openstax.org/details/books/calculus-volume-2>.
- **Active Calculus** by Matthew Boelkins. You can view a pdf or interactive E-Book here: <https://activecalculus.org/ACS.html>.

You may choose to use either of the above as a reference. Daily class notes/worksheets will be posted on Moodle to summarize regular lectures.

GRAPHING UTILITY

 You do not need a graphing calculator, and we will not use them in the class. Instead, we will use the [website](https://www.desmos.com) and app called Desmos.

This is a free, easy-to-use graphing utility. I will often utilize the website in class, and I encourage you to download the app on a phone or tablet device for your own use. If we were going to have in-class exams this semester (we won't be - more on that further down), then I would even allow you to use Desmos for exams! But I guess you can just use it anyway, regardless!

Note: Any calculator that can perform symbolic manipulation (such as the TI-89, TI-92, and TI-CAS) will not be allowed for tests. In general, please be aware that providing a final answer without enough supporting work or reasoning will receive no credit.

EDFINITY



What is Edfinity?

Edfinity is an online homework system. To meet the needs of all students in a fair, equitable, and safe way, we will be using Edfinity for most homework assignments this semester. You will access your Edfinity assignments through Moodle and you can see more info on the [Edfinity Homework](#) tab on our Moodle course page.

How do I use Edfinity?

Do not create an account on the Edfinity website directly, as it needs to be connected to your Moodle account. When you select an assignment here in Moodle, a new window will open taking you to the assignment on the Edfinity site. You will never need to access the Edfinity website directly without going through Moodle.

The very first time you open an Edfinity assignment from Moodle, you will be prompted to enter your access code. You will need an access code to register for the course on Edfinity. These cost \$25. You can purchase one directly from the Edfinity site or from the [Wilson Bookstore](#). If you are using financial aid to purchase books, then you must purchase the access code from the bookstore. Any student who is in need of financial assistance outside of your own financial aid should contact the [Dean of Students Office](#), dos@wooster.edu.

§D. Technology and Communication Expectations

- Moodle.** Our course website can be reached directly through the following URL: <http://moodle-2021.wooster.edu/>. Look for “Calc & Analytic Geometry II Metacourse SP21 (MATH-11200-MC)” in your dashboard. Consider Moodle the central location for all aspects of our course. **Always check their first.**

Note: The **Metacourse** in the title of the Moodle page means that it is a combination page for both Math 112 Section 01 and Math 112 Section 02. Logistically, it is much easier to maintain and update one Moodle course for both sections than to always post the exact same thing twice on an almost daily basis. I have hidden the single Moodle pages for your respective sections, so there will never be a problem with you being in the “wrong” Moodle course.

- MS Teams.** Our Microsoft Teams page (also a Metacourse) will be meeting place for live-streamed lectures and office hours. You will be invited to virtual meetings on Microsoft Teams using your college email id. Be sure to attend the meeting for the correct section!

Note: New information regarding the structure of face-to-face meetings will be posted when we move to in-person classes. Roughly speaking, each student will be assigned to one of three groups. Only one group will attend each lecture in-person at-a-time with the remaining two online.

- MS Streams.** Class meetings will be recorded and available immediately via MS Streams. Go to [this link](#), and *sort by Publish Date* to find the recordings. Office Hour meetings will not be recorded. The link is also pinned in MS Teams.

Note: To address privacy concerns, you will only be able to stream recorded sessions online, you will not be able to download it.

- Please make sure that you have access to the following technological equipment to ensure

- ▷ **A laptop or tablet device.** Please plan on bringing this device with you to all in person meetings when we move to classrooms.
- ▷ **A modern web browser.** Firefox or Edge or Chrome is preferred. Browsers such as Safari might not work with Edfinity homeworks.
- ▷ Reliable access to high-speed **internet**.
- ▷ An active **MS Office account** through your **wooster.edu** access, so that you can access email, Moodle, and MS Teams.

Note: All the technology we use in this course is intended to enhance our learning. If you foresee troubles with this, the sooner I know, the better I can help; so please do not hesitate to discuss this with me.

- Due to the hybrid format of the course and the unpredictable pandemic situation, it is imperative that you maintain awareness of course announcements and other communications. **Each student is expected to check their email, Moodle announcements, and MS Teams posts at least once per day and preferably more than once.** All important information will be pushed to you as soon as possible; it's your responsibility to check messages regularly and act on the information. "I didn't see the announcement" will not be accepted as an excuse!
- The best way to contact me outside of class is by email or via chat in MS Teams. I will typically only check email and other messages between 8am EST and 8pm EST on weekdays and sporadically on weekends. If you send a message that needs a response during those times, you can expect to get a response within about 2 hours. Otherwise you can expect one when I am back online.
- For any private communication regarding this course, please email me from your wooster.edu email address. This is mainly for identity verification purposes.

§E. How to succeed as an Online Learner - Sit in the "Front Row"

Things may feel out-of-control right now. You may be facing a lot of unknowns and disruptions. Here are some tips for staying organized and motivated as an online/remote learner.*

WHERE IS THE FRONT ROW IN A VIRTUAL CLASSROOM?

Most of us have a longstanding perception of what "school" looks like and it isn't sitting in your kitchen counter in pajamas. That is the first step to doing well this semester: reconsider how you perceive **where** teaching and learning can happen.

WHAT FRONT ROW STUDENTS DO?

- **Check your class material** for each subject early, as soon as it's released in every class.
- **Get to your Teams meeting early** and make yourself nod and look at the teacher in a synchronous class. (We love that and miss your nods desperately). Please **keep your video on** unless you have a reason not (I won't ask you to turn on your video or why it is off).
- **Raise your hand.** Send emails or chats to your teachers to engage them; do not hide in the proverbial back row. Make up questions to ask if you must.

*Source: <https://grownandflown.com/college-professors-advice-online-learning-sit-front-row/>

- **Write notes constantly**, even when you don't think you need to or don't think anyone will care if you are. Your brain cares. It will eventually matter to your learning (I promise this).
- **Sit up straight in your chair.** Sure, you can take an online class on your bed, but you don't think as clearly when you are slouched. Cognitive science studies tell us this. This and doing the "rituals" of brushing our teeth, taking a shower, and dressing as we would to look professional make us act and respond more professionally.
- **Set up a dedicated study space.** Arrange it the way YOU want it. Act like you do when you go to the library to do homework and have to be quiet, even if it's actually your dorm room or outside.
- **Avoiding multitasking.** If you're doing more work on your own and your time is less structured, you might be more tempted to multitask. Many people think they can do multiple things at once. But research shows us that only about 2% of the population can multitask. So
 - Close distracting tabs and apps.
 - Turn off your phone or turn it to silent.
 - Try your best to **Watch recordings at normal speed.**
- **Set a schedule.** Setting a schedule for yourself can help provide structure and keep you motivated. If you don't already keep a weekly or daily calendar, this is the perfect time to start. Include time for exercise and self-care! Figure out how and when you learn best.

A brief note about time commitment. In high school, you might have been used to a day of 6-8 hours of lecture followed by 2 hours of homework. In college, the situation is reversed. For most courses, plan to spend at least two hours for reviewing class materials, per one hour of in-class lecture. This adds up to about 9-10 hours of work per week. Assuming four courses, this is 40 hours of work per week, or 8 hours per weekday - the time you will spend at your future workplace.

- **Work with a group or team.** Remote collaboration will look a little different, but it is definitely possible. Consider a quick text on your group chat about progress every couple of days. If someone has been absent from your group meetings or chat, ask them directly if they're still able to participate in the project. If you aren't getting responses within a day or two, let your instructor know. Know it isn't being petty, it's your team's responsibility.
- **Stay Connected.** Even if we limit how much face-to-face time we spend with others on campus, connecting with family and friends might be more important than ever. And staying in touch with instructors, classmates, and group mates is still important for continued classwork.

§F. Getting Help

MY OFFICE HOURS

Please come see me during my office hours if you have questions or just want to discuss something from class. For safety and efficiency, this semester I plan to hold office hours virtually and by appointment on Microsoft Teams.

- To meet with me in office hours, you can book a time slot through [Microsoft Bookings by following this link.](#)

- The time slots are 20 minutes by default. **Try to avoid booking two slots in row** to give all students equal opportunity for scheduling a meeting. If you need more time, say so at the end of the meeting and we will find another time to meet again.
- When you book a time slot, you will receive a link to a Teams meeting.
- If you and a classmate have similar questions, please feel free to share the link with them and **come together!**
- If I am fully booked, or you can not make my usual office hours, please send me an email and we can work out an alternate time to meet virtually.

Office hours are most effective if you have spent some time formulating your questions beforehand - often you will answer your own questions during that process! You can also contact me via Email or MS Teams with your questions. See the communication expectations section above (section D) for my 'business' hours!

THE MATH CENTER

Free help in this course is offered via the [Math Center](#). It is located on Microsoft Teams for the Spring 2021 semester. You may not need assistance all the time, but when you do, a helpful tutor can assist you and help you get unstuck!

- **Math Center Hours** (beginning January 24): Sunday 6:00-10:00 PM, MTWF 1:00 – 10:00 PM
- Students can leave questions in the Math Center Team to be answered later during off hours or they can meet face to face with Professor Kirsch or a student tutor during open hours.

STEM ZONE INTERNS

During most Tuesday classes, zone interns from both sections will be available online via MS Teams. They will assist with AEPs and other assignments much in the same way as me: by answering questions and providing guidance. The main role of a zone intern is to be a peer-tutor and mentor to help strengthen your understanding of the course material. Your zone intern will hold their own office hours within the math center. Your section's ZI and contact info is listed in the first page. Their office hours in the Math Center will be posted on Moodle.

THE LEARNING CENTER

The Learning Center, which is located in APEX (Gault library) offers a variety of academic support services, programs and 1:1 meetings available to all students. Popular areas of support include time management techniques, class preparation tips, and test taking strategies. In addition the Learning Center coordinates peer-tutoring for several academic departments. Students are encouraged to schedule an appointment at the APEX front desk or call ext. 2595.

An additional support that the Learning Center offers is English Language Learning. Students can receive instruction or support with English grammar, sentence structure, writing, reading comprehension, reading speed, vocabulary, listening comprehension, speaking fluency, pronunciation, and American culture through 1:1 meetings with the Learning Center staff, ELL Peer Tutoring, ELL Writing Studio courses, and other programming offered throughout the year.

SUPPORT FOR STUDENTS WITH DISABILITIES

The Learning Center also coordinates accommodations for students with diagnosed disabilities. At the beginning of the semester, students should contact the Learning Center to make arrangements for

securing appropriate accommodations. Although the Learning Center will notify me of students with documented disabilities and the approved accommodations, you are encouraged to speak with me directly during the first week of the semester. If a student does not request accommodations or does not provide documentation to the Learning Center, faculty are under no obligation to provide accommodations.

WRITING CENTER

Effective written communication is a cornerstone of the Wooster curriculum, from First-Year Seminar through Senior Independent Study. To assist students in growing as writers, the Writing Center offers a range of services at no cost, through professional staff and peer tutors. More information is on the [Writing Center website](#), and appointments are available at writing_center@wooster.edu, or ext. 2205.

CONFLICTS WITH ACADEMIC RESPONSIBILITIES

As a student you have the responsibility to inform me of potential conflicts as soon as you are aware of them, and to discuss and work with the faculty member to identify alternative ways to fulfill your academic commitments without sacrificing the academic integrity and rigor of the course.

§G. Community Expectations

DIVERSITY AND INCLUSION

I consider our classroom to be a place where you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability - and other visible and non-visible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class.

Your success in this course is important to me. If there are circumstances that may affect your academic performance or impact your learning in particular portions of the class, please let me know as soon as possible. You do not need to share specifics, but together we can develop strategies to meet both your needs and the requirements of the course.

No student is required to take an examination or fulfill other scheduled course requirements on recognized [religious holidays](#). Please declare your intention to observe these holidays at the beginning of the semester.

NAMES, PRONOUNS & PRONUNCIATION

All people have the right to be addressed and referred to as they prefer. I will do my best to address and refer to all students by the names and pronouns that they share in class, regardless of what is listed on the roster, and I support classmates in doing so as well. I would like for you to refer to me as **Prof./Dr. Chowdhury**. I use he/him/his pronouns. Please share the name you prefer to be called and pronouns you wish to use in this class with me via the Moodle survey.

If you are interested in changing your chosen name and/or including your pronoun(s) in The College of Wooster system, [you can find additional information here](#). What appears in The College of Wooster system is what will display in Microsoft Teams. There is no alternative way to change your name or to add pronouns in Teams, but you can add a background that includes these. For instructions on designing a personalized background, see [here](#).

I encourage everyone in this classroom to create a space of mutual respect and support by also giving each other some grace around pronouns, pronunciation of names, etc., if or when we make mistakes. This is not

at all to absolve anyone of responsibility for using correct pronouns, names, and pronunciations. But I find it useful to acknowledge that even with the best of intentions, sometimes we can all still make mistakes.

§H. Other College Policies

PRIVACY POLICIES REGARDING COURSE MATERIALS & RECORDINGS

The materials on this course shared on Moodle and Teams are only for the use of students enrolled in this course, for purposes associated with this course, and may not be further distributed. All class recordings will be posted only on password-protected websites (such as Moodle, Teams or Stream) that are only available to course participants and for the duration of the course. These are to be used for educational purposes only; no one should distribute recordings, screenshots, or other class material beyond class without the express permission of all involved in the recording. College classrooms are places to test out new ideas, challenge assumptions, and engage timely and sometimes sensitive issues. Students who enter this space should be able to do so with the assurance that their comments will not be shared beyond the classroom.

College policy states that no **student** may record or tape or photograph any classroom activity without the express written consent of the faculty member. If you need to record/tape a class, then you need to contact the Office of the Secretary for permission.

PASS/FAIL & COURSE DROP OPTIONS (FOR SPRING 2021)

For Spring 2021, students may drop a course until the last day of classes, Tuesday April 27th. Students may drop one course, up to 1.25 credits, at any time through the last day of classes (Tuesday, April 27 by 4:00PM), as long as their total remaining credits are above 3.0. This may be done without documentation of extenuating circumstances. Students may also designate any course (also in major/minor) as pass-fail until one week after final grades are posted.

COLLEGE POLICY ON FINAL EXAMS

No final examinations are to be given during the last week of classes or on reading days. Students who wish to reschedule a final exam must petition the Dean for Curriculum and Academic Engagement in writing in advance of the examination. The student must confer with the instructor before submitting a petition, and the instructor should indicate to the Dean if they supports the petition. **Normally, such petitions are granted only for health reasons. If other reasons necessitate a request for a change in a final exam, the request must be submitted three weeks in advance of the examination.**

THE COLLEGE LIBRARIES AND THE RESEARCH HELP DESK

Your librarian for this course is [Zachary Sharrow](#). You can ask your librarian for help with research in this class and can make an appointment with them using the research consultation form for help with your research and information needs, including finding and using items we have in the Libraries; learning expert tips to refine your search for articles in magazines, journals, and newspapers; making an appointment with a librarian for help on a project; and learning how to evaluate the information you discover.

WELL-BEING AT WOOSTER

The College of Wooster is committed to supporting the well-being of our students. During the course of their academic careers, students experience challenges that contribute to barriers in learning and can interfere with daily life, including but not limited to: strained relationships, adjusting to a new

environment, chronic worrying, persistent sadness or loss of interest in enjoyable activities, family conflict, grief and loss, domestic violence, unwanted sexual experiences, difficulty concentrating, drug/alcohol problems, significant changes in eating and sleeping patterns, microaggressions, challenges with organization, procrastination and/or lack of motivation. Counseling Services at the Longbrake Student Wellness Center is a free and confidential resource providing short-term counseling and connections to community agencies for students needing longer term or specialized resources. You can make an appointment by calling 330-263-2319 between 8:30am-4:30pm during weekdays or by emailing Lori Stine (lstine@wooster.edu). You can also find helpful resources on the Counseling Services website at <https://www.wooster.edu/offices/health/counseling/>.

If you or a friend is in crisis, please call Security and Protective Services at 330-287-3333 or the National Suicide Prevention Lifeline (1-800-273-TALK) or connect with the Crisis Text Line by Texting “4HOPE” to 741-741.

For financial concerns: Dean of Students Office, dos@wooster.edu (330) 263-2545, [DoS website](#)

For safety concerns: Campus Security and Protective Services (330)263-2590 or cow-security@wooster.edu, [SPS website](#). **In the care of an emergency, call: 330-287-3333.**

TITLE IX REPORTING POLICY

The College of Wooster is committed to fostering a campus community based on respect and nonviolence. To this end, we recognize that all Wooster community members are responsible for ensuring that our community is free from discrimination, gender bias, sexual harassment, and sexual assault. In accordance with Title IX, Wooster is legally obligated to investigate incidents of sexual harassment and sexual assault that occur on our campus. Faculty who become aware of an incident of sexual violence, including harassment, rape, sexual assault, relationship violence, or stalking, are mandated reporters at the College and are required to notify Wooster’s Title IX Coordinator. The purpose of this disclosure is to ensure that students are made aware of their reporting options and resources for support. For more information about your rights and reporting options at Wooster, including confidential and anonymous reporting options, please visit <http://www.wooster.edu/offices/title-ix/>.

DISCRIMINATORY OR BIAS-RELATED HARASSMENT REPORTING POLICY

The College of Wooster is committed to promoting its mission of inclusivity and equity in all aspects of the educational enterprise. This commitment extends to all rights, privileges, programs and activities, including housing, employment, admissions, financial assistance, and educational and athletic programs at the College. The College’s Bias Incident Reporting Process is designed to effectively respond to bias concerns raised by faculty, students, staff, alumni and visitors to the College. If you or someone you know are the victims of bias, you can:

- [File a report online](#) (where you may choose to identify yourself or not)
- Contact Security and Protective Services: 2590 (from campus phone) or 330-263-2590
- Call the Anonymous Tip Line: 2337 (from campus phone) or 330-263-2337
- Contact the Dean of Students Office: 2545 (from a campus phone) or 330-263-2545
- Contact the Chief Diversity, Equity, and Inclusion Officer, Dr. Ivonne M. García, 2167 (from campus phone) or 330-263-2167 or email at igarcia@wooster.edu.

§I. Credits

A lot of the syllabus language in different course documents have been copied from syllabi by Prof. Rob Kelvey and Prof. Robert Talbert.

§J. Syllabus Changes

I reserve the right to make changes to this syllabus, if needed. Any changes will be announced to the class in a timely manner. You can find a preliminary outline of the topics that we hope to cover in this course in the next page. This is an idealized plan, and it **may be adjusted as the semester progresses**.

§K. Tentative Schedule and Important Dates

Week	Monday	Tuesday	Wednesday	Friday
				DC1
1 (Jan 18-22)		MLK Day	First Day of Class (Syllabus Discussion)	Calc 1 Recap
	IT1	IT2		IT3
2 (Jan 25-29)	Integration by Substitution	Integrals with Exp and Log	More Examples of Integration + Checkpoint 1 (DC1, IT1, IT2)	Integration By Parts
	In-Person Classes Start		IT4	IT5
3 (Feb 1-5)	Practice on identifying the order in Integration by Parts	Time Management Workshop + Checkpoint 2 (DC1, IT1, IT2, IT3)	Trig Integrals of Type A, Revisit Trig Identities, Trig Integrals of Type B	Integration by Trig Substitution and Other Integration Techniques
	IT6		AI1	AI2
4 (Feb 8-12)	Practice Problems	AEP 1 + Checkpoint 3 (DC1, IT1, IT2, IT3, IT4, IT5, IT6)	Area of a region between two Curves - using Horizontal and Vertical slices	Calculating Volume of Solid of Revolution - Disk Method
	AI2	AI3	AI4	AI4
5 (Feb 15-19)	Calculating Volume of Solid of Revolution - Washer Method	Practice on Correctly Identifying Disk vs Washer method + Checkpoint 4 (IT2, IT3, IT4, IT5, IT6, AI1, AI2, AI3)	Arc Length of a curve	Surface Area of Solids of Revolution
	AI5		DE1	DE2
6 (Feb 22-26)	Applications in Physics and Engineering - Work, Hydrostatic Pressure	AEP 2 + Checkpoint 5 (IT4, IT5, IT6, AI1, AI2, AI3, AI4, AI5)	Introduction to Differential Equations, Exponential Growth and Decay	Modeling Exponential Process - Half-life, Solving IVPs using Antiderivatives

	DE3	DE4	SS1	SS1
7 (Mar 1-5)	Solving Separable Differential Equations	Euler's Method + Checkpoint 6 (AI1, AI2, AI3, AI4, AI5, DE1, DE2, DE3)	Improper Integrals + Review Infinite Limits	More on Improper Integrals, Comparison Theorem and p-Test
	SS2		SS2	SS3
8 (Mar 8-12)	Introduction to Sequences + Checkpoint 7 (AI4, AI5, DE1, DE2, DE3, DE4, SS1)	Rest Day 1	Convergence and Divergence of Sequences	Introduction To Series - Partial Sums
	SS3	C11	SS4	SS5
9 (Mar 15-19)	Geometric Series, Divergence Test	AEP 3 + Checkpoint 8 (DE1, DE2, DE3, DE4, SS1, SS2, SS3)	Integral Test of Convergence	Comparison and Limit Comparison Tests
	SS5	SS8	SS6	SS6
10 (Mar 22-26)	Practice Problems on Integral, Comparison, and Limit Comparison Tests	Identify the correct strategy for Convergence Test + Checkpoint 9 (DE1, DE2, DE3, DE4, SS1, SS2, SS3, SS4, SS5)	Alternating Series, Conditional Convergence	Practice of Absolute and Conditional Convergence
	SS7		SS7	SS8
11 (Mar 29-Apr 2)	Ratio and Root Test	Practice on Convergence Tests + Checkpoint 10 (DE4, SS1, SS2, SS3, SS4, SS5, SS6, SS7)	Practice on Ratio and Root Test	More practice on correctly Identifying the Convergence Test
				PA1
12 (Apr 5-9)	Rest Day 1.5	AEP 4 + Checkpoint 11 (SS4, SS5, SS6, SS7, SS8)	Rest Day 2	Introduction to Power Series
	PA1		PA2	PA3
13 (Apr 12-16)	Interval and Radius of Convergence	Checkpoint 12 (SS6, SS7, SS8, PA1)	Practice on finding Power Series Expansion	Taylor Polynomial and Series
	PA3			
14 (Apr 19-23)	Finding and Using Taylor Series	AEP 5 + Checkpoint 13 (SS8, PA1, PA2, PA3)	Graphing Function of Two Variables and Contour Plots	Partial Derivative, Example of Ideal gas Equation
		Last day to Drop the course		
15 (Apr 26-30)	Double Integral on type I and type II regions	Last Day of Class + Checkpoint 14 (PA1, PA2, PA3)	Reading Days	