MATH 2414 COURSE SYLLABUS

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YEAR COURSE OFFERED: 2021-2022

SEMESTER COURSE OFFERED: Spring

DEPARTMENT: MATH

COURSE NUMBER: 2414 – (Section: 18577)

NAME OF COURSE: Calculus II

NAME OF INSTRUCTOR: Dr. Melahat Almus

Instructor Information
• Instructor: Dr. Melahat Almus (http://www.math.uh.edu/~almus)
• Office Hours: Virtual office hour information can be found on CASA.
• Email: malmus@uh.edu

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The information contained in this class syllabus is subject to change; the instructor reserves the right to make changes. Any changes will be announced on CASA or in class. Students are expected to be aware of any additional course policies presented by the instructor during the course.

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NOTE (TCCNS Course Code): If you see any reference to “Math 1432” in your textbook, your instructor’s notes, website or any other course materials, note that Math 1432 is the previous code for Calculus II and we will be using the code “Math 2414” starting Fall 2021.

TECHNOLOGY REQUIREMENTS:
Computer and internet access is required for this course. In summary, students will need:
• a functioning and updated computer
• reliable internet connection
• PDF viewer
• Ability to log in to CASA for online assignments.
• Ability to watch mp4 files.
• Ability to access Microsoft TEAMS platform. Note that all UH students have access to MS teams with their cougarnet ID.
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COURSE DELIVERY FORMAT

This course is being offered in the face to face format. This course is not self-paced; students are expected to follow assignment due dates as specified on CASA calendar. Lectures for this course will take place according to the class schedule. This is a face to face lecture and by signing up for this class, students agree that they are available during the meeting times. There are on campus exams.

Due to the changing nature of the pandemic, the team for this lecture will be created and available on MS TEAMS. In case of a need to move to the online setting, all students will be enrolled in the team.

- Make sure you are a member of the team: H_20221_MATH_2414_18577. All students enrolled in the course will be automatically enrolled in the team – no need to enter codes.
- If we ever move to the online setting: Students are expected to behave professionally during live meetings. Any students who do not follow the university’s code of conduct might be removed from the meeting. Turn off your webcam and microphone before joining the meeting.

Face Covering Policy
To reduce the spread of COVID-19, the University strongly encourages everyone (vaccinated or not) to wear face coverings indoors on campus including classrooms for both faculty and students.

Presence in Class
Your presence in class each session means that you:

- Are NOT exhibiting any Coronavirus Symptoms that makes you think that you may have COVID-19
- Have NOT tested positive or been diagnosed for COVID-19
- Have NOT knowingly been exposed to someone with COVID-19 or suspected/presumed COVID-19

If you are experiencing any COVID-19 symptoms that are not clearly related to a pre-existing medical condition, do not come to class. Please see Student Protocols for what to do if you experience symptoms and Potential Exposure to Coronavirus for what to do if you have potentially been exposed to COVID-19. Consult the (select: Undergraduate Excused Absence Policy or Graduate Excused Absence Policy) for information regarding excused absences due to medical reasons.

COVID-19 Information
Students are encouraged to visit the University’s COVID-19 website for important information including on-campus testing, vaccines, diagnosis and symptom protocols, campus cleaning and safety practices, report forms, and positive cases on campus. Please check the website throughout the semester for updates.
Vaccinations
Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent vaccine information, consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

Reasonable Academic Adjustments/Auxiliary Aids
The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact the Justin Dart Jr. Student Accessibility Center (formerly the Justin Dart, Jr. Center for Students with Disabilities).

Excused Absence Policy
Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Undergraduate Excused Absence Policy and Graduate Excused Absence Policy for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.

Recording of Class
Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Justin Dart, Jr. Student Accessibility Center. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor’s recordings for their own studying and notetaking. Instructor’s recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes
Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to
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make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible through CASA and/or MS Teams.

UH Email
Please check and use your Cougarnet email for communications related to this course. To access this email, login to your Microsoft 365 account with your Cougarnet credentials.

Webcams
Access to a webcam is required for students participating remotely in this course. Webcams will be required to be turned on if the classes move to an online setting.

Honor Code Statement
Students may be asked to sign an honor code statement as part of their submission of any graded work including but not limited to projects, quizzes, and exams.

Helpful Information
Coogs Care: https://www.uh.edu/dsaes/coogscare/
Student Health Center: https://www.uh.edu/healthcenter/
Laptop Checkout Requests: https://www.uh.edu/infotech/about/planning/off-campus/index.php#do-you-need-a-laptop

TEXTBOOK & ACCESS CODE

The textbook, online quizzes, and additional help materials will be made available by logging into CourseWare at http://www.casa.uh.edu. The first portion of these materials are freely available for the first two weeks of class. Students are required to purchase an access code to access the learning materials by the due date announced on CASA. Access code can be purchased at UH Book Store. If you don’t enter the code by the deadline stated on CASA, you will lose access to CASA temporarily – until you enter the code. If students miss assignments during the no access period, they should not expect to have make up options for those assignments.

RECITATIONS (LABS)
Any student who is registered for this course should also be registered for a lab section. You will not receive a separate grade for the lab section. The recitations are led by Teaching Assistants from the mathematics department. Record your TA’s name and email. Labs start on the first day of school.

Your TA will answer questions you bring to the lab; it is strongly recommended that you attend every lab. Make sure you attend the lab you are enrolled for in PeopleSoft. Check your lab time and section number from PeopleSoft.
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Labs are considered as part of our “lectures” and afore mentioned rules about lectures apply to labs; students are expected to behave according to UH Student Handbook and code of conduct. You can find the channel for your lab in our lecture Team on MS Teams. If your TA has to move the lab to an online setting (temporarily), the meetings will be held in those channels.

ASSESSMENTS
A student in this class is expected to complete the following assignments:

1) 4 Regular Exams  
2) Final Exam  
3) Online Quizzes  
4) Homework  
5) Attendance/participation (popper grades will be counted under HW grades)

Components and Weights of Semester Assignments:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>3%</td>
</tr>
<tr>
<td>Test 2</td>
<td>15%</td>
</tr>
<tr>
<td>Test 3</td>
<td>15%</td>
</tr>
<tr>
<td>Test 4</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Online Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Homework (and attendance/participation)</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Note: The percentage grade on the final exam (without extra credit) can be used to replace your lowest test score if it is better than your lowest test grade.

GRADING SCALE
If “x” is your average, letter grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 ≤ x</td>
</tr>
<tr>
<td>A-</td>
<td>90 ≤ x &lt; 93</td>
</tr>
<tr>
<td>B+</td>
<td>87 ≤ x &lt; 90</td>
</tr>
<tr>
<td>B</td>
<td>83 ≤ x &lt; 87</td>
</tr>
<tr>
<td>B-</td>
<td>80 ≤ x &lt; 83</td>
</tr>
<tr>
<td>C+</td>
<td>77 ≤ x &lt; 80</td>
</tr>
<tr>
<td>C</td>
<td>73 ≤ x &lt; 77</td>
</tr>
<tr>
<td>C-</td>
<td>70 ≤ x &lt; 73</td>
</tr>
<tr>
<td>D</td>
<td>67 ≤ x &lt; 70</td>
</tr>
<tr>
<td>D-</td>
<td>63 ≤ x &lt; 67</td>
</tr>
<tr>
<td>D</td>
<td>60 ≤ x &lt; 63</td>
</tr>
<tr>
<td>F</td>
<td>below 60</td>
</tr>
</tbody>
</table>
EXAM INFORMATION

There will be 4 tests along with a mandatory final exam. This course requires proctored on-campus exams.

- Test 1 is an online test covering pre-requisites (Calculus 1) - see below for more information.
- Tests 2,3,4 and final exam will be taken at CASA Testing Center by reservation.
- Tests will be taken with reservation; **you must make a reservation to take a test prior to the first testing day.** Follow the instructions on CASA to reserve a time for your tests; print out the webpage showing your reservation time for your records and proof of your reservation. Reservations are made on a first come first served basis; schedule your exams as soon as the scheduler opens up.
- If you miss your reserved time, log in to your account to see if there are any other time slots available and if so, make a new reservation.
- You have 1 attempt on all tests.
- You can NOT use calculators during any of the exams; study accordingly.
- There are no retakes on any of the exams.

**Important:** Tests 2, 3, 4 and Final Exam will have a **Free Response portion**; the answer sheets will be provided by the testing center before the exam begins. More information about the tests will be given before each test.

Test 1 is over the pre-requisite material (Calculus 1).
It is recommended to take practice test 1 first to see what to expect on Test 1. You can review basic calculus topics to prepare for this test. You can find help videos for these topics on the course website (and here: [CALCULUS HELP VIDEOS](#)). Test 1 is mainly given for self-assessment purposes; make sure you show an honest attempt.

**IMPORTANT:** If you score low on Test 1 (below 60 without extra credit); you may consider dropping this course and taking the prerequisite course to prepare yourself for this course. If you decide not to drop, it is strongly recommended that you sign up for an SEP workshop designed for Math 2414 students; you can add a workshop in your PS account before the last day to add.

Exam topics: *(Any changes on the exam topics or dates will be announced on the course website or at CASA calendar) (The dates have been updated in February due to the winter storm. Any further changes will be posted on the calendar.)*

<table>
<thead>
<tr>
<th>Test</th>
<th>Prerequisite Material (Calculus 1)</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>Prerequisite Material (Calculus 1)</td>
<td>Jan21-Jan28</td>
</tr>
<tr>
<td>Test 2</td>
<td>Chapter 7</td>
<td>Feb12-Feb15</td>
</tr>
<tr>
<td>Test 3</td>
<td>Chapter 8</td>
<td>Mar10-Mar12</td>
</tr>
<tr>
<td>Test 4</td>
<td>Chapter 9</td>
<td>Apr21-Apr23</td>
</tr>
<tr>
<td>Final</td>
<td>Comprehensive (Chapters 7,8,9,10)</td>
<td>May9-May12</td>
</tr>
</tbody>
</table>
Final Exam:

Final is comprehensive and mandatory for ALL students. **There is no “exemption” or “opt-out” from the final.** Reserve a seat for it when reservation begins. Reservations are made online at CASA on a first come first serve basis. **Make your travel plans so that you are available during the testing period.**

Your raw score on the final will be used to replace the lowest test score if it is better. The primary reason for this policy is to offset the impact of zero scores due to emergencies on a student’s final course grade.

**Grade Appeals:** Grade appeals on any assignments should be made within 5 business days of the posting of the assignment grade.

**EXTRA CREDIT**

There are practice tests and a practice final on CASA website. If you take the practice test, then 5% of the highest score you earn will be applied to the relevant test as extra credit on the corresponding exam. You can take the practice tests several times (up to 20 times) and we only take your best score. Pay attention to the “end” dates on these. In general, practice tests end the night before the exam starts (except for PT 1). Practice tests will not be reopened for any reason; make sure you take them on time. If you see practice tests posted as “Practice Test # (NC)” note that they are not for credit; they are given only for practice purposes – during the testing window.

**INSTRUCTIONS FOR QUIZZES**

Online quizzes will be given regularly in this course.

- The quizzes are located in the CASA CourseWare course website under the “Online Assignments” tab.
- The quizzes will close on the due dates given on CourseWare at 11:59 pm and will not re-open. If the quiz is still open when the time expires, your work will not be saved; you must **submit** any online assignment before 11:59pm.
- The lowest 2 quizzes will be dropped. The primary reason for this policy is to offset the impact of zero/low quiz scores due to emergencies on a student’s final course grade.
- You have 20 times to take each quiz.
- There is a 60 minute time limit for most quizzes (some longer quizzes might have 75 minutes).
- There may be 2 or more quizzes due every week; check the due dates carefully.

Once a quiz closes, then it is over for the semester. Neither your instructor, nor the Math Department, is responsible for any difficulty that you have in accessing the quizzes. Please don’t delay taking quizzes – there are times during the week when CourseWare is slow or overloaded. There is no amnesty period for the quizzes; the quizzes will NOT be reopened at the end of the semester.
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Please contact CourseWare tech support directly if you are having problems. The email link is on the CASA homepage.

INSTRUCTIONS FOR HOMEWORK

There are weekly homework assignments. The homework problems and due dates will be posted on CASA. Some weeks, there might be more than one assignment.

- **For multiple choice homework (EHW):**
  - Problems can be found under the EMCF tab as a PDF file.
  - You will submit your answers using “EMCF” tab at CASA before the due date by clicking on the choices there (there is no “submit” button).
  - Your score on the EHW is the number of correct answers out of the total number of questions.

- **For written homework (WHW):**
  - The problems will be posted as a PDF file under Assignments tab. Follow the instructions there to submit your WHW as a single PDF file. Not following the instructions might result in your HW not being accepted. WHW must be submitted using CASA; e-mail submissions will not be accepted.

- Students are expected to check the calendar on CASA often (to see the due dates for HW and quizzes) and to plan ahead and work on the assignments in a timely manner.
- Students are expected follow Academic Honesty Policies and submit their own work. Students who use unauthorized sources might be reported to the department.

INSTRUCTIONS FOR POPPERS (Attendance)

Attendance is important for your learning experience in this class. Do your best to attend lectures and labs regularly. Recall the “presence in class” item. We might not take attendance at every lecture. Try your best to attend regardless of whether attendance will be taken or not. Your motivation to come to class should mainly be to learn the material.

Starting 3rd week, your instructor might assign poppers (attendance questions) during lectures.

Poppers will be turned in under EMCF tab at CASA.

Students will need a device with internet connection (laptop, smart phone, etc.) so that they can turn in poppers during the lecture. If you do not have a device to turn in poppers, see: **Laptop Checkout Requests**: [https://www.uh.edu/infotech/about/planning/off-campus/index.php#do-you-need-a-laptop](https://www.uh.edu/infotech/about/planning/off-campus/index.php#do-you-need-a-laptop)

Your instructor will explain how the poppers will work in class. Your instructor might lock questions as they proceed, last question(s) being due by the end of the lecture; the exact time will be specified by
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your instructor and will be visible under EMCF tab at CASA. Students who come in late may not be able to turn in questions given earlier in the lecture.

15% of poppers will be dropped to cover for emergencies or unexpected events. If you face an absence that exceeds the dropped amount and it might be considered an excused absence, read the excused absence policy and contact your instructor.

Note: Occasionally, for some sections, pre-recorded lecture videos with popper questions embedded in them might be assigned. Turn in the popper under EMCF tab at CASA under the corresponding title (the title will be specified on the video). For example, Popper S6.4 corresponds to poppers given on the video covering “Section 6.4”.

Total popper grades (participation grades) will be counted under HW grades; depending on the amount of poppers given throughout the semester, popper/participation grades will be assigned as 1 or more HW grades.

Sharing answers to popper questions (online, or at group chats, or at any other source) is considered an academic honesty policy violation. Please read the information regarding Academic Honesty below and do not share answers to poppers with your friends. Not only this is cheating; this also prevents other students from learning the material and hence such violations are taken very seriously.

LATE ASSIGNMENT AND MAKE-UP POLICY

This course is a cumulative course. You as a student need to keep up with the reading, quizzes, homework assignments and exams. Students are expected to check the calendar on CASA several times a week and plan ahead so that they don’t miss assignments. We drop some assignments primarily to offset the impact of zero/low scores due to emergencies on a student’s final course grade. Hence, students should not expect to have an option to make up missed assignments unless in the case of an excused absence (See: Excused Absence Policy below).

If you miss a test, it may be possible to reschedule a test appointment during the testing period (depending on space availability) by using the online scheduler. Rescheduling must be made online in your account; your instructor is not responsible for finding seats or making reservations for you. Your final exam score will replace your lowest midterm exam score if the former is higher. (A missed test will result in a score of zero. If you miss two or more exams, only one of those scores will be replaced.) The primary reason for this policy is to offset the impact of zero/low test scores due to emergencies on a student’s final course grade.

If requesting make up work (assignment or test) due to an excused absence: the student needs to contact the instructor in writing before the next class meeting (or as soon as possible afterwards with an explanation regarding why the notice could not be sent before the next class meeting). Read the Undergraduate Excused Absence Policy to see a list of documentations to support your
request; follow the guidelines provided on this document to make your request. Your instructor will inform you of the decision in writing (via email).

Note: If students lose access to CASA temporarily due to not entering access code by the deadline, or being temporarily dropped from the course for non-payment, then they are responsible for any assignment deadlines that are missed.

**Religious Holy Days:** Students whose religious beliefs prohibit class attendance or the completion of specific assignments on designated dates may obtain an excused absence. To do so, please make a written request for an excused absence and submit it to your instructor as soon as possible, to allow the instructor to make arrangements. For more information, see the Student Handbook. [http://catalog.uh.edu/index.php](http://catalog.uh.edu/index.php)

**COPYRIGHT**

The materials provided by the instructor in this course are for the use of the students enrolled in the course only. Copyrighted course materials may not be further disseminated without instructor permission. This includes sharing content to commercial course material suppliers such as Course Hero or Chegg. Students are also prohibited from sharing materials derived from the instructor’s content (e.g., a student’s lecture notes). Sharing homework, quiz or test problems with commercial course material suppliers is a violation of copyrights.

**COMMUNICATION via EMAIL**

Email communications related to this course will be sent to your Exchange email account which each University of Houston student receives. The Exchange mail server can be accessed via Outlook, which provides a single location for organizing and managing day-to-day information, from email and calendars to contacts and task lists. Exchange email accounts can be accessed by logging into Office 365 with your Cougarnet credentials or through Access UH. They can also be configured on IOS and Android mobile devices. Additional assistance can be found at the [Get Help](https://www.math.uh.edu/~tomforde/Email-Etiquette.html) page.

Per UH Policy, notices properly addressed and so sent (for example, via PeopleSoft) shall be presumed to have been received by the student. Thus, you are responsible for the content in emails sent to your UH account, regardless if your external (non-UH) email provider filters or blocks them. When emailing your instructor, it is recommended that you use a professional email address and include the course name on the subject line so that your instructor can address your questions accordingly. Please read this link for more on communication via email: [EMAIL ETIQUETTE](https://www.math.uh.edu/~tomforde/Email-Etiquette.html).

**IMPORTANT:** Note that your instructor will communicate with you via email. Your instructor will not reply to chat messages via MS TEAMS. Calls from MS TEAMS will not be responded to unless they are made by appointment. If you leave a voice mail at your instructor’s office phone, he/she might not receive it. The best way of communication with your instructor outside of class times is via email.
OFFICE HOURS:
Office hours will be hold virtually via MS Teams; more information on how to join the office hour will be provided on CASA and in our lecture team.
If you need to speak with your instructor privately, email your instructor to arrange a virtual meeting with your instructor.

ACADEMIC HONESTY POLICY

University of Houston students are expected to adhere to the Academic Honesty Policy as described in the UH Undergraduate Catalog. “Academic dishonesty” means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements.
Academic dishonesty includes, but is not limited to, the following: 
- Plagiarism
- Cheating and Unauthorized Group Work
- Fabrication, Falsification, and Misrepresentation
- Stealing and Abuse of Academic Materials
- Complicity in Academic Dishonesty
- Academic Misconduct.

Refer to the UH Academic Honesty website and the UH Student Catalog for the definition of these terms and university’s policy on Academic Dishonesty. Anyone caught cheating will be reported to the department for further disciplinary actions, receive sanctions as explained on these documents, and will have an academic dishonesty record at the Provosts office. The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. Students may not receive a W for courses in which they have been found in violation of the Academic Honesty Policy. If a W is received prior to a finding of policy violation, the student will become liable for the Academic Honesty penalty, including F grades.

Posting answers for Poppers or Homework questions online (at group chats or other online tools) is considered an academic honesty violation. Students are expected to know the difference between “getting/giving HELP on a problem” and “getting/giving answers to a problem”. If a student is caught sharing answers (in person or online), he/she might be reported to the departmental hearing officer for an academic honesty violation. If a student becomes aware of cheating or any other violations; that student is responsible for informing the instructor.

UH CAPS

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus.
https://uh.edu/caps/outreach/lets-talk/
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List of discussion/lecture topics

Chapter 7 - Applications of Integration
7.1 Integration Review
7.2 Area
7.3 Volume
7.4 Centroids
7.5 Arc Length and Surface Area
7.6 Differential Equations and Exponential Growth/Decay
7.7 Improper Integrals

Chapter 8 - Techniques of Integration
8.1 Integration by Parts
8.2 Powers of Trigonometric Functions
8.3 Trigonometric Substitutions
8.4 Integrating Rational Functions
8.5 Numerical Integration

Chapter 9 - Sequences and Series
9.1 Bounded Sets and Sequences
9.2 Convergence of Sequences
9.3 Numerical Series and Convergence
9.4 Integral Test, Comparison Tests
9.5 The Ratio Test and the Root test
9.6 Alternating Series and Absolute Convergence
9.7 The Power Series
9.8 The Taylor Series

Chapter 10 - Polar Coordinates and Parametric Equations
10.1 Polar Coordinates and Polar Curves
10.2 Area and Arc Length in Polar Coordinates
10.3 Parametric Equations
10.4 Derivatives for Curves Given Parametrically
10.5 Arc Length and Surface Area for Curves Given Parametrically