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Spring 2019    MAA5229/4227 sec 15658/15625    MAT 2 period 5

Office Hours MF 7 OBA

Text: Principles of Mathematical Analysis by Walter Rudin

This course has proved to be an exciting format for students in science and related fields who are interested in obtaining a background in the foundations of Analysis that can be used in advanced work using sophisticated mathematical techniques. The text is a classic one covering metric spaces, basic topology, compact sets series, etc (chapters 1-6) . Applications are given. Due to the varied backgrounds the class will be conducted as a seminar with discussions of the concepts involved. Lebesgue theory and Hilbert spaces will be covered. Grades are determined by class attendance, good note taking, and quizzes. Be sure to get notes from a fellow student of a class is missed. 6 or more classes and the grade is lowered by a letter.

Spring 2019    MAP 2302 sec 15676 6th LIT 207    Office Hours MF 7 OBA

Tests: Feb 8, March 15, April 22, April 24

Each test is worth 40 points. 160 points total for course

Text Differential Equations book by Nagle, Saff, Snider, 9th ed.

There are no make up tests, a grade of 0 is given for a missed test. No aids of any kind used during the tests.

6 or more absences and the grade is lowered by a letter

Questions concerning a returned test must be asked within a week.

Be sure to get assignments from a fellow student if a class is missed

since some of the material may not be in the text..

Volunteer work at the board may receive extra points.

A handout will be passed out with much more detail and gone over in depth.

**BE SURE TO TAKE ADVANTAGE OF THE BROWARD TUTORING LAB!!**

For credit on tests, the solutions **MUST** use the method presented in class

especially for Exact equations and the UC method (the text is not complete for this method).

Spring 2016 MAA 5229 sec 7059 5th Lit 207 OH MF 7 oba

Text if Principles of Mathematical Analysis, by Walter Rudin, 3rd ed.

This course has proved to be an exciting format for students in science and related fields who are interested in obtaining a background in the foundations of

Analysis that can be used in advanced work using sophisticated mathematical

techniques. The course is conducted as a seminar with class discussions of

the concepts involved. The topics from Rudin include the Riemann-Stieltjes integral,

sequences and series of functions, uniform convergence with applications,

equicontinuous families of functions, the Arzela-Ascoli theorems, Stone- Weierstrass theorems,

Lebesgue theory, convergence theorems is this theory, many applications, Hilbert and Banach spaces, applications to probability theory.

J.K. Brooks Professor of Mathematics Lit 306 jkbrooks@ufl.edu OH MF 7 oba

SPRING 2016 MAP 2302 sec 3148 6th Lit 205

Tests: Feb 12, March 18, April 18, April 20 Each test is worth 40 points

Total points for course 160. No aids of any kind used during tests

Text: Differential equations by Zill and Wright 8th edition

There are no make up tests, a grade of 0 if given for a missed test.

6 or more absences and the grade is lowered by a letter.

Questions concerning a returned test must be asked within a week.

Be sure to get assignments and notes from a fellow student if a class is missed since some of the material may not be in the text. Volunteers who present solutions to homework problems at the board are eligible to receive extra points.

**TAKE ADVANTAGE OF THE BROWARD TUTORING LAB !!**

J.K. Brooks Professor of mathematics LIT 306 jkbrooks@ufl.edu

Course: MAA 5228 section 7877 FALL 2015 Modern Analysis LIT 201 MWF 5

Office hours: ME 6 or by appointment

Office hours: MWF 6-8 or by appointment

Text: Principles of Mathematical Analysis by Walter Rudin 3rd ed.

This course has proved to be an exciting format for students in science and related fields who are interested in obtaining a background in the foundations of Analysis that can be used in advanced work using sophisticated mathematical techniques. The text is a classic one covering metric spaces, basic topology, compact sets sequences and series, continuity, differentiation and integration with applications. (Chapters 1-6). Due to the varied backgrounds the class will be conducted as a seminar with class discussions of the concepts involved. There will be quizzes every 7-10 days. Be sure to obtain notes from a fellow student if a class is missed. The last two days of class are devoted to exams.

Course: MAP 2302 section 5603 MWF 4 LIT 125 OH MF 6 oba FALL 2015

Text: Differential Equations by Zill and Wright 8th edition

Tests: Sept 25, Oct 23, Dec 7, Dec 9 each test is 40 points

Total points is 160. There may be "bonus quizzes" unannounced if time permits,

details will be given in class. Volunteers who present solutions to homework problems are eligible to receive extra points. All information concerning this course is given below in the syllabus for MAP Spring 2014. Please consult this.

For emphasis note the following: No make up tests, a grade of 0 is given for a missed test Six or more absences and the grade is lowered by a letter. Be sure to get assignments and notes from a fellow student if a class is missed. Questions concerning a returned test must be asked within a week. The most severe grading is 100-90 A, 89-85 B+, etc.

TAKE ADVANTAGE OF THE BROWARD TUTORING LAB!

Student evaluations are online <https://evaluations.ufl.edu>

J.K. Brooks Professor of Mathematics Lit 306 [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu)  
Course: MAP 2302 section 3148 MWF 6 LIT 217 SPRING 2015

Instructor: J.K. Brooks LIT 306 [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu) OH: MF 7 oba

Tests: Feb 13, March 20, April 20, April 22 Each test is worth 40 points.

Total points 160. No aids of any kind used during test.

All information concerning this course (except for test dates) are given below in the syllabus for MAP 2302 SPRING 2014. Please consult this.

For emphasis note the following: No make up test, a grade of 0 is given for a missed test. Six or more absences and grade is lowered by a letter.

Be sure to get assignments and note from a fellow student if a class is missed

since some of the material may not be in the text. Be sure to obtain the 6th edition of the book used in the course. Questions concerning a returned test must be asked within a week. Volunteers who present solutions to homework problems at the board are eligible to receive extra points.

**TAKE ADVANTAGE OF THE BROWARD TUTORING LAB!!**

Course: MAA 5229 section 7059 LIT 219 MWF 5 LIT 219 SPRING 2015

Instructor: J.K.Brooks OH: MF 7 oba

This course continues the Analysis course MAA 5228, same text. There will be quizzes every 7-10 days. Chapters 5,6,7,10 will be covered. All information in the syllabus for MAA 5228 FALL, 2014 applies to this course. Please consult this.

Course MAA 5228 MWF 5 section 7877 Lit 203 Fall 2014

Text: Principles of Mathematical Analysis, by Walter Rudin, 3rd ed.

Office hours MF 7 oba

This course will cover the first 5 chapters. There will be quizzes every 7-10

days. These count for 50% of the grade. There will be a midterm and final exams on Dec 8 and Dec 10 in class. Please see the syllabus for this course for Fall 2013 below for more information concerning this course.

Course MAP 2302 MWF 6 Lit 201 section 0100 Fall 2014

Office hours: MF 7 o ba

Text: Differential equations and Boundary Valued Problems, 6 th ed. by Nagle, Saff, Snider.

There will be 4 tests each weighted the same given in class

Sept 26, Oct 24, Dec 8 and Dec 10.

Assignments will be posted on the board. Please see the syllabus below of this course for Spring 2014. all information will be the same except for the

test dates . The tentative weekly schedules are: 1.; 1.1, 1.2. 2. 2.1-2.3

3. 2.4-2.6. 4. 2.6, review. 5. 4.1-4.3. 6. undetermined coefficients.

7. Continue UC method. 8. 4.6, 4.7. 9. review higher order equations.

10. 7.1, 7.2. 11. 7.3, 7.4. 12. 7.5, review. 13. 7.6. 14. 7.7, 7.8.

Course: MAP 2302 MWF 5, LIT 203, section 3146, SPRING 2014

Instructor: J.K. Brooks, LIT 306, [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu)

Office hours: MW 6 o ba

Text: Differential Equations and Boundary Value Problems, 6th edition

by Nagle, Saff, Snider

This course is designed to introduce some methods to solve certain types of differential equations. We begin with methods for first order equations.

Next is the UC method for higher order equations, then the Laplace transform and finally series solutions if time permits. It is important to keep up to date on the various methods presented. Problem assignments will be posted on the board in class. Some of the problems and examples in the book may appear on tests.

There will be 4 tests (each weighted the same) given in class: Feb 7, March 14, April 21, April 23. There will be no make up exams – a grade of 0 will be given for a missed test. In the event of a medical emergency an accommodation may be considered with a complete documented doctor's letter. If test dates should change advance notice will be given. Any questions concerning the tests must be asked within one week after they are handed back.

If you should miss a class be sure to obtain notes and assignments from a fellow student since some material may not be in the text but may appear on exams. No aids or calculators are to be used for tests. Any student who plans to participate in the Disability Resource Center must contact me after their first class meeting. If it is ascertained that 6 classes have been missed the grade will be lowered by one letter. **BE SURE TO TAKE ADVANTAGE OF THE BROWARD TUTORING LAB!**



The most severe grading scale is the standard one: 100-90 A, 89-85 B+, etc.

Tentative weekly schedule (problems 1-25 ODD are assigned in each section covered): Jan 6: 1.1,1.2,2.2: Jan 13: 2.3,2.4: Jan 20: 2.4,2.6; Jan 27: 2.6, review; Feb 3: 4.1-4.3; Feb 10: UC method; Feb 17 continue UC; Feb 24: 4.6,4.7; March 10: reviews, test; March 17: 7.1,7.2; March 24: 7.3,7.4; March 31: 7.5 April 7: 7.6,7.7; April 13: 7.8, review.

Student evaluations (last 2 weeks of class) on line at <https://evaluations.ufl.edu>

Course: MAA 5229/4267 MWF 4 LIT 239 SPRING 2014

Instructor: J.K. Brooks, LIT 306 [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu)

Office hours: MF 6 oba

Text: Principles of Mathematical Analysis by Walter Rudin 3rd edition

This course is the second part of introductory analysis and will be conducted in the same fashion as the first part. Quizzes count for 50% and several tests and a final April 21 and April 23 will constitute the other 50%. We will cover chapters 7,8,10 – Lebesgue theory. Many problems will be assigned in the text and additional ones given in class. Be sure to obtain notes from a fellow student if you miss a class. If you miss 6 or more classes, the grade will be lowered by one letter. The most severe grading is 100-90 A, 89-85 B+ , etc.

Student evaluations (last 2 weeks of class) are online <https://evaluations.ufl.edu>

Course: MAA 5228/4266, MWF 4, sections 8525/1484, Fall 2013.

Instructor: J.K. Brooks, LIT 306, jkbrooks@ufl.edu

Office hours: MF 6 or by appointment

Text: Principles of Mathematical Analysis by Walter Rudin, 3rd ed.

This course will cover real and complex number systems in Ch 1. In Chapter 2 we study metric spaces and basic topology, compact sets, properties, perfect sets. In Ch 3 we study sequences and series, the root and ratio tests. Ch 4 continuity, compactness, monotone functions. Ch 5 differentiation, mean value theorems, L'Hospital's rule, Taylor's theorem. In Ch 6 the Riemann-Stieltjes integral and properties is covered.

There will be quizzes every 7-10 days. These count for 40% of the grade. There will be 2 tests and final exams on Dec 2 and Dec 4. Most of the problems in the above chapters will be assigned in addition to numerous additional problems given in class. Be sure to obtain notes from a fellow student if you miss a class. If you miss 6 or more classes, the grade will be lowered by one letter. The most severe grading scale is the standard one: 100-90 A; 89-85 B+, etc.

No aids or calculators are to be used for any quizzes or tests.

Student evaluations (last 2 weeks of class are online at <https://evaluations.ufl.edu>)

Course : MAP 2302 MWF 5, LIT 203, section 5607, Fall 2013

Instructor: J.K. Brooks, LIT 306, jkbrooks@ufl.edu

Office hours: MF 6 or by appointment

Text: Differential Equations and Boundary Value Problems, 6th ed. by Nagle, Saff, Snider

This course is designed to introduce some methods to solve certain types of differential equations. We begin with methods for First Order Equations. Next is the UC method for higher order equations, then the Laplace transform and finally series solutions if time permits. It is important to keep up to date on the various methods presented. Problem assignments will be posted on the board in class. Some of the problems and examples in the book may appear on tests.

There will be 4 tests (each weighted the same) given in class: Sept 27, Oct 25, Dec 2, Dec 4.

There will be no makeup exams – a grade of 0 will be given for a missed test. In the event of a medical emergency an accommodation may be considered with a complete documented doctor's letter. If the test dates should change advance notice will be given.

If you should miss a class be sure to obtain notes and assignments from a fellow student since some material may not be in the text but may appear on exams. No aids or calculators are to be used for any tests. Any student who plans to participate in the Disability Resource Center must contact me after their first class meeting. If it is ascertained that 6 classes have been missed, the grade will be lowered by one letter. **BE SURE TO TAKE ADVANTAGE OF THE BROWARD TUTORING LAB!**

The most severe grading scale is the standard one: 100-90 A; 89-85 B+; etc.

Tentative weekly schedule (problems 1-25 ODD are assigned in each section covered)  
Aug 21; 1.1,1.2; Aug 26; 2.1-2.3; Sept 2; 2.4-2.6; Sept 9; 2.6, review; Sept 16; 4.1-4.3  
Sept 23; undetermined coefficients; Sept 30; continue UC method; Oct 7; 4.6,4.7;  
Oct 13; review, higher order equations; Oct 21; 7.1,7.2; Oct 28; 7.3,7.4; Nov 4; 7.5, review;  
Nov 11 7.6; Nov 18; 7.7,7.8.

Student evaluations (last 2 weeks of class) on line at <https://evaluations.ufl.edu>

Course MAA 7526 Advanced Functional Analysis section 7718 mwf 7 LIT 223

Instructor: J.K. Brooks, LIT 306 [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu)

Office hours MF 6 or by appointment

This course continues to be conducted in a seminar fashion as in the fall and covers material in the book Fundamentals of the Theory of Operator Algebras vol 1 by Kadison and Ringrose (and other material) We plan to cover the entire book (Banach Algebras,  $C^*$ -Algebras, von Neumann Algebras) and present applications to various areas.

Course MAP 2302 MWF 5 LIT203 section 3146 Spring 2013

Instructor J. Brooks LIT 306 [jkbrooks@ufl.edu](mailto:jkbrooks@ufl.edu)

Office hours MF 6 or by appointment

Text: Differential equations and Boundary Value Problems, 6th ed.

by Nagle, Saff, Snider

This course is designed to introduce some methods to solve certain types of differential equations. Prerequisites include swift calculations of derivatives and integrals and algebraic manipulation. It is important to keep up to date on the various methods presented. Problem assignments will be posted on the board in class. Some of the problems and examples in the book and those put on the board may appear on the tests. There will be 5 tests (each worth 40 points) given during the term in class: Feb 1, Feb25, April 5, April22, April 24. If the dates should change advance notice will be given. Since it is vital to keep up with assignments there will be quizzes (announced or unannounced) which may account up to 15% of the grade, depending on the number given. There will be NO makeup exams; a grade of 0 will be given for a missed test or quiz. In the event of a medical emergency an accommodation MAY be considered with a complete documented doctor's letter. If you should miss a class it is your duty to obtain the assignment from a fellow student. If it is ascertained that 5 classes have been missed, and E grade will be given. You should obtain several phone numbers from fellow students to contact for missed classes since some material presented may not be in the text but will appear on exams. You are required to keep a file of all tests and quizzes handed back and a copy of this sheet which I handed out and went over in class. Be sure to get any problem assignments you missed from a fellow student. No aids or calculators are to be used for any quizzes or tests. The most severe grading scale is the standard one: 100-90 A; 89-85 B+, etc.

## Fall 2012 Courses

MAP 2302 MWF 6 Lit 201 section 0100

Office Hours MW 8 or by appointment

Text: Differential Equations and Boundary Value Problems 6th ed.  
by Nagle, Saff, Snider

The syllabus has been handed out in class and completely discussed.

Problem assignments will be posted on the board in class.

There will be 5 tests given during the term in class: Sept 19; Oct 17; Nov 16;  
Dec 3 and Dec 5. Each test is worth 20% of the grade. A missed test will  
be assigned a grade 0, no makeup tests. If there is a medical emergency an  
accommodation may be considered with a complete doctor's letter.

If you should miss a class you must obtain the assignments and notes from a  
fellow student since material presented may not be in the text but will appear on exams.

If it is ascertained that 5 classes have been missed and E grade will be given.

No aids or calculators are to be used for tests. Any student who plans to participate  
in the Disability Resource Center must contact me after their first class meeting.

The most severe grade scale is the standard one: 100-90 A, 89-85 B+ etc.

MAA 7526 MWF 7 Lit 223 section 5443

Office Hours MW 8 or by appointment

This course will be conducted in a seminar fashion and will cover the first three  
chapters in the book *Fundamentals of the Theory of Operator Algebras* vol 1  
by Kadison and Ringrose. The second semester will cover  $C^*$ -algebras and  
von Neumann algebra theory from this book. Additional topics will be covered  
including functional analysis applied to probability theory.

