

Syllabus modifications

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class & by email. Updates will be available at: <http://faculty.winthrop.edu/kultt/MATH 202>.

Course and departmental goals for students

This course meets the Logic, Language, and Semiotics requirement through activities and requirements that require students to: (1) use logic and mathematical information to draw reasonable conclusions and (2) use the symbols and language of mathematics to communicate about problems and present solutions.

Students apply fundamental mathematical concepts and techniques to solve problems and evaluate results.

- Students will apply integration and differentiation techniques to the transcendental functions
- Students will master new techniques of integration (e.g. integration by parts, trigonometric substitution, partial fractions, etc.)
- Students will apply integration, utilizing new techniques, to real world problems
- Students will gain a working knowledge of sequences and series
- Students will use power series to represent transcendental functions over appropriate intervals

For purposes of departmental assessment of student learning in this course, sections of the final exam will be tabulated for all students and cover the goals listed above. Individual tests and course grades may also be used as an indication of progress toward the above goals.

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Policies

1. Review the student code of conduct for university polices on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: <http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf>
2. All electronic devices (including cell phones) other than a calculator should be on silent and kept in your book bag or purse throughout class time unless otherwise instructed. (Note if you have some educational, health, or physical reason for an electronic device you must work with your professor to inform them of the accommodation.)
3. The University attendance policy is stated in the current catalog <http://www.winthrop.edu/recandreg/default.aspx?id=7380>.
4. A grade of C or better in MATH202 is required to enroll in MATH301.
5. Students are expected to use skills from MAED200 to implement the use of *Mathematica*.

SU Deadline: March 7
Spring Break: March 12 – 18

Course Withdraw Date: March 7
Final Exam: May 1

Course calendar

The following is a tentative guideline, as I want to keep the flexibility to modify the pace and add or remove topics as appropriate. Exams do not share this flexibility -- this will allow more effective planning by all.

M	January 9		5.1	Area between two curves
W	11		5.2	Volume: The disk method
F	13		5.3	Volume: The shell method
W	18	QUIZ		
F	20		5.4	Arc length
M	23	QUIZ	5.5	Area of a surface of revolution
W	25		6.8	Hyperbolic functions
F	27		7.2	Integration by parts
M	30			
W	February 1	ASSESSMENT		Exam 1
F	3		7.3	Trigonometric integrals
M	6	QUIZ	7.4	Trigonometric substitutions
W	8		7.5	Integration of rational functions by partial fractions
F	10		7.7	Numerical integration
M	13	QUIZ		
W	15		7.8	Improper integrals
F	17			
M	20	QUIZ LAB 1 DUE	8.2	Separation of variables
W	22		8.4	First order differential equations
F	24			
M	27	ASSESSMENT		Exam 2
W	29		9.1	Sequences
F	March 2		9.2	Monotonic sequences
M	5	QUIZ	9.3	Infinite series
W	7		9.4	Convergence tests
F	9		9.5	Comparison, ratio, and root tests
M	19	QUIZ	9.6	Alternating series Absolute and conditional convergence
W	21			
F	23		9.7	Taylor polynomials
M	26			
W	28	LAB 2 DUE	ASSESSMENT	Exam 3
F	30		9.8	Taylor series
M	April 2	QUIZ	9.9	Convergence of Taylor series
W	4		9.10	Differentiating and integrating power series
F	6		10.1	Parametric equations
M	9	QUIZ	10.1	Parametric differentiation
W	11		10.2	Polar coordinates
F	13			
M	16	LAB 3 DUE	10.3	Polar differentiation & integration
W	18			
F	20		ASSESSMENT	Exam 4
M	23	QUIZ		Review
M	May 1		ASSESSMENT	Final Exam, 3 – 5:30p