Print Form

Faculty Council on *Academic* Affairs Curricular Cleanup 2009

Form for Streamlining pre-2008 Courses Through Full Governance

Email completed form and most current syllabus to: Sabrina Guth <s-guth1@neiu.edu>. Also print completed form, collect departmental signatures, and mail to Sabrina in the Faculty Senate Office. This form is only valid for use through 10/15 2009 and only may be used for pre-2008 courses that have not been reviewed through full governance.

Current Course:

MATH	464B	Advanced Topics Real Analysis: Fourier Analysis	3
dept prefix	*number*	*course title*	*credit hrs*

Proposed Course *(must be same level and have same credit hours)*:

MATH	464B	Advanced Topics Real Analysis: Fourier Analysis
dept prefix	*number*	*course title*

Abbreviated Course Title *(29 character limit if full title is longer)*: Fourier Analysis

How many times has course been taught in the last 5 years? # 5

Ave. weekly contact hrs: # 3 Is this course repeatable? ☒ YES NO ☐ Required for the major? YES ☐ NO ☐

Is course restricted by student level, major, or counts for graduate credit, etc.? ☒ YES NO ☐

If yes, explain: Graduate credit.

Categories *(check all that apply; default categories are checked for Academic Affairs purposes)*:

☐ *Discussion*	☐ *Lab*	☐ *Practice Teaching*	☐ *Tutored Study*
☐ *Field Experience*	☒ *Lecture*	☐ *Studio*	☐ *Video Conferen.*
☐ *Hybrid*	☐ *Master's Project*	☐ *Self Study*	
☐ *Independ. Study*	☐ *Online*	☐ *Student Teaching*	
☐ *Internship*	☐ *Practicum*	☐ *Thesis Seminar*	

Course Description *(to appear in the Academic Catalog; 100 word limit)*:

Fourier series: convergence, continuity, differentiability, integrability, and applications.

Prerequisite(s): Graduate standing, Math 338, or consent of instructor.

Provide short paragraph narrative explanation of the origins of the course and its significance to the program:

The course is devoted to basic facts about Fourier series and the Fourier transform, with an emphasis on specific examples and applications. The course will introduce graduate students to applications to a variety of fields such as approximation theory, signal analysis, probability and statistics, and differential equations.

Signatures:

Chair/Coordinator	*date*	*FCAA Chair*	*date*
2nd Departmental Faculty Member	*date*	*Provost*	*date*

CLASS:	**ADVANCED TOPICS IN REAL ANALYSIS: FOURIER ANALYSIS MATH 464, SPRING 2011**
INSTRUCTOR:	Dr. Marian Gidea
LECTURE:	TR 7:05 pm - 8:20pm, Science Building SCI-131
OFFICE:	Science Building 204D
E-MAIL:	mgidea@neiu.edu
PHONE:	Office: (773) 442-5779, Cell: (312) 933-0696
OFFICE HOURS:	TR 3:00-4:00pm and 5:30pm - 7:00pm
TEXT:	Thomson, Brian S. et al. *Elementary Real Analysis.* Second Edition. www.classicalrealanalysis.com, 2008. The text is available for $1.00 as a download from www.classicalrealanalysis.com
CLASS DESCRIPTION:	Fourier series: convergence, continuity, differentiability, integrability, and applications.
PREREQUISITE:	Graduate standing, MATH-326, or consent of instructor.
COURSE OUTLINE:	Chapters 1-10 from textbook. Not all sections in these chapters will be covered.
PERFORMANCE OUTCOMES/GOALS:	Students who successfully complete this course should be able to perform the following: 1. analyze the convergence, continuity and differentiability of Fourier series 2. understand Riemann and Lebesgue integration of Fourier series 3. apply Fourier series to solving partial differential equations, etc…
MULTIPLE ASSESSMENT INSTRUMENTS:	• **EXAMINATIONS:** **Midterm 1:** Thursday, February 10* -100 pts. **Midterm 2:** Thursday, March 31* - 100 pts. **Final exam (comprehensive):** Thursday, May 5 (8:00 -9:50pm) - 100pts. **Quizzes and homework:** 100 points. • **EXTRA CREDIT POINTS:** for class participation. • **GRADES**: A 350+; B 300+; C 250+; D 200+. • **The dates marked with a star are subject to change.**
MAKE-UP TESTS:	Make up tests will be given in case of illness verified by a note from a physician or a death in your family.
RECOMMENDATIONS:	• Attendance and participation in the lecture class is recommended. • You are expected to read the textbook for comprehension.
MISCELLANEOUS:	• The instructor reserves the right to make any changes he considers academically advisable. These eventual changes will be announced in class. • The students are expected to adhere to accepted standards of academic integrity. These may be found in the Student Handbook. It is the student's responsibility to be aware of behaviors that constitute academic dishonesty. • Last day to drop a course: Friday, April 1.