Course Number and

and MTH201, Calculus III

Name:

Class Time and Location:
Credits and Contact

MWF at 13:00, BB1007

Contact 3 Credits, 3 sessions per week

Credits Hours:

Semester: Spring 2013

Last Revised on

## INSTRUCTOR

Name: Rony Touma

Email: rony.touma@lau.edu.lb Course Page: Blackboard Office: Orme Gray 414

Office Hours: MWF 09:00-10:00 and TR 08:00-09:00

#### **CURRENT CATALOG DESCRIPTION**

This course covers hyperbolic functions, integration techniques and improper integrals. The course covers also infinite sequences and series: limits of sequences of numbers, bounded sequences, integral test for series, comparison tests, ratio and root tests, alternating series test, absolute and conditional convergence, power series, Taylor and Maclaurin series, and applications of power series. Polar functions, polar coordinates, and graphing of polar curves are also covered. In addition, topics from multivariable calculus are introduced: functions of several variables, partial derivatives, double integrals, applications to double integrals, and double integrals in polar form.

### COURSE PREREQUISITE/CO-REQUISTE

Prerequisite: Sophomore Standing.

## TEXTBOOK AND REFERENCES

Weir/Hass/Giordano, Thomas' Calculus, 12th edition, Addison Wesley.

# COURSE TYPE

Required Elective Selective Elective

## **COURSE LEARNING OUTCOMES**

- CLO1. Students will acquire the skills needed to solve definite, indefinite, improper and double integrals.
- CLO2. Students will be able to solve applied problems using integrals.
- CLO3. Students will be able to identify simple series and to find and/or estimate the sum of a series using partial sums
- CLO4. Students will be able to test the convergence of sequences and series, and to create MacLaurin series for transcendental functions.

## COURSE GRADING AND PERFORMANCE CRITERIA

2 Exams	70 %
Final exam (cumulative)	30 %

# **TOPICS COVERED IN THE COURSE**

- 1. Hyperbolic Functions
- 2. Techniques of Integration
- 3. Polar Coordinates
- 4. Infinite sequences and series

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5. Functions of several variables

6.Double Integrals

### **ASSESSMENT PLAN FOR THE COURSE**

**Embedded Assessment** 

#### POLICY ON CHEATING AND PLAGIARISM

Students caught cheating on an exam receive a grade of zero on the exam in their first cheating attempt and receive a warning. Students caught cheating for the second time will receive a grade of "F" in the course and another warning. Plagiarism on assignments and project work is a serious offense. If plagiarism is detected, a student will be subject to penalty, similar to the cheating case, which ranges from receiving a zero on the assignment concerned to an "F" in the course in addition to a warning.

### **ATTENDANCE POLICY**

Missing one third of classes implies that a student has to drop the course.

- 1. Students are held responsible for all the material presented in the classroom, even during their absence.
- 2. Students can miss no more than the equivalent of five weeks of instruction and still receive credit for that course.
- 3. Instructors have the right to impose specific attendance regulations in their courses, provided that the above-stated limit of absences is not exceeded, and the minimum number of absences allowed is no fewer than the equivalent of two weeks of classroom instruction, after the Drop and Add period.
- 4. Instructors will inform the Departments Chairperson and the Guidance Office, of any prolonged unexplained absence.
- 5. Students who exceed the allowed number of absences must withdraw from the course; otherwise, the course grade will be recorded as "F" (NP).

### WITHDRAWAL POLICY

"Students wishing to withdraw from one or more courses must follow the withdrawal procedure provided by the Registrar's Office. Students withdrawing from courses after the late registration period and before the withdrawal deadline will receive Ws for all the courses in progress."

**Deadline for withdrawal from courses**: April 25, 2013 (It is the student's responsibility to drop the course)

**New Withdrawal Policy** 

- 1. A student who withdraws after the Drop/Add period and by the end of the 5th week of classes (10th day of classes for Summer Modules) will obtain a "WI" on that particular course. The student may process such request directly through the Registrar's Office.
- 2. A student who withdraws from a course between the 6th week and the end of the 10th week of classes (18th day of classes for Summer Modules) will receive either a "WP" or a "WF". "WP" or "WF" will be determined by the instructor based on the achieved academic performance in that course till the time of withdrawal.
- 3. The "WI" and the "WP" will not count as a Repeat; whereas the "WF" will count as a Repeat.
- 4. "WI", "WP" and "WF" will not count towards the GPA calculation.

WI is equivalent to Early Withdrawal

WP is equivalent to Withdrawal/Pass

WF is equivalent to Withdrawal/Fail

## COURSE EVALUATION

Completion of the online course evaluations is required. Students will not be able to access their course grades until they have completed the course evaluations.

