

# MTH 162 (Calculus II)

University of Miami

Spring 2015

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**Course section:** F6-S6   **Mo We Fr**   **1:25pm-2:15pm**   **MM 314**

**Th**   **3:30pm-4:45pm**   **MM 317**

**Instructor:** Armando Cabrera Pacheco

**Office:** Ferre 221   **Office phone:** 305.284.1733   **Office hours:**   **Mo We 2:30pm-3:00pm**  
and by appointment.

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## Text

*Essential Calculus*, Second Edition, James Stewart.

**Course Description:** Transcendental functions, methods of integration, L'hospital's Rule and improper integrals, infinite series, polar coordinates, and introduction to differential equations.

## Other required materials

**WebAssign:** An access code for WebAssign is bundled with the new textbook purchased through the University of Miami Bookstore. You may also purchase the student access directly on the website: <http://www.webassign.net> or through the publishing company website <http://www.cengagebrain.com>. If you purchase WebAssign with the ebook, you do not need to purchase the physical text.

**WebAssign Class Key:** miami 3536 4517

## Grading Policy

The final grade will be determined according to the following table:

Exams	<b>60</b> points	There will be four exams during the semester. Each exam will be worth 15 points.
Quizzes	<b>10</b> points	There will be several in-class and take-home quizzes, the average of their grades will determine the proportion of the 10 points you obtain.
Homework	<b>10</b> points	Homework will be assigned weekly.
Final Exam	<b>20</b> points	The final exam will be comprehensive.
Bonus Test		This test will be optional, and its grade will replace the grade of the lowest exam (not including the final exam).

\* If you will be missing any class for any religious holy day, you must notify your instructor during the first week of classes. Please refer to the Undergraduate Bulletin for the University policy on observance of Religious Holy Days.

The Final Exam will be on:

**Wednesday, April 29th, 2015** (It is scheduled by the university and it is subject to change).

The grade equivalence is as follows:

Grade	Range	Grade	Range
A	93-100	C+	77-79
A-	90-92	C	73-76
B+	87-89	C-	70-72
B	83-86	D+	67-69
B-	80-82	D	60-66

#### **Honor Code**

The Honor Code will appear on each exam. Students should consult the *Undergraduate Bulletin* for details of the Honor Code. Any infraction of the Honor Code will result in a grade of “F” for the course and a referral to the Dean of Students.

#### **Supplemental instruction**

The Math Lab, located in Merrick Building Room 304, is available to all students enrolled in this course. Tutors are available at the Math Lab on a walk-in basis.

#### **Calculator policy**

Students may use a basic scientific calculator for exams and quizzes in this class. Graphing calculators and calculators with programming and alpha-numeric capabilities will not be permitted during exams and quizzes.

#### **Electronic devices in the classroom**

All electronic devices must be turned off in the classroom at all times. This includes cell phones, tablets, MP3/music players, etc. The use of laptops or tablets may be allowed during certain classroom activities as determined by the instructor.

### Reporting of Academic Progress

Midterm Academic Deficiency Reports for undergraduate students will be reported by the date determined by the university. Undergraduate students whose performance is unsatisfactory (D or F) will be notified through **GradesFirst**.

### Make-up Policy

Any student who cannot take an exam on the specified date for a legitimate and documented reason must make arrangements with their instructor to take the exam prior to that date. No exams will be given after the specified test date. If an emergency occurs on the day of the exam, you **MUST CONTACT YOUR INSTRUCTOR IMMEDIATELY**.

## MTH 162 Syllabus

**Text:** *Essential Calculus*, Second Edition, James Stewart.

- **Chapter 5 (Inverse Functions)**

Inverse functions. Derivatives and integrals of logarithmic, exponential, inverse trigonometric and hyperbolic functions. Indeterminate forms and l'Hospital's Rule.

- **Chapter 6 (Techniques of Integration)**

Integration by parts, trigonometric substitutions and partial fractions. Approximate integration. Improper integrals.

- **Chapter 7 (Applications of Integration)**

Differential equations. Exponential growth. Logistic growth.

- **Chapter 8 (Series)**

Sequences. Series. Tests for convergence and divergence of series. The integral, comparison, alternating and ratio tests. Power series and representation of functions. Taylor and Maclaurin series.

- **Chapter 9 (Parametric Equations and Polar Coordinates)**

Curves defined by parametric equations; tangent, areas, and arc lengths using parametric equations. Polar coordinates