
Supplement to the Embry-Riddle Daytona Beach Campus 2009/10 Catalog

The following corrections apply to the 2009/10 catalog for the Daytona Beach campus of Embry-Riddle Aeronautical University with an effective date of July 1, 2009.

MA 350

Partial Differential Equations (3,0)

3 Credits

Physical models leading to partial differential equations. Fourier series and Fourier transforms. Solution of linear partial differential equations, including solutions of the wave, heat and Laplace's equation.

Prerequisite: MA 345.

MA 444

Scientific Visualization (3,0)

3 Credits

Scientific visualization is the representation of data graphically as a means of gaining understanding and insight into the data. This course will introduce different aspects of scientific visualization: computer graphics and related mathematics concepts, application packages for interactive display and analysis of data.

Prerequisites: CS 315 and CS 344.

MA 453

High Performance Scientific Computing (3,0)

3 Credits

This course is an introduction to parallel computing in computational mathematics and sciences with practical applications. We start with an overview of parallel computing and study the problem of program efficiency on parallel computers. Then we introduce two major programming paradigms: shared memory and message passing. The last third of the course will focus on applications of parallel computing in the sciences (Engineering, Physics, Mathematics, etc.).

Prerequisites: CS 375 and MA 432.

MA 488

Numerical Methods in Fluids (3,0)

3 Credits

This course explores the theory and applications of numerical methods in fluid mechanics. The topics covered will include numerical methods for incompressible flows; primitive variable and vorticity-stream function on formulation; numerical treatment for inviscid and viscous flows, including restricted to incompressible flow. Emphasis will be placed on numerical methods based on finite difference, finite volume, or finite element formulations.

Prerequisite: MA 350 and WX 201.

Corequisite: ES 312.

MA 490

Capstone Project (1,6)

3 Credits

This course is focused on the development of a functioning software product as it applies to a computational problem in the area of aviation and aerospace. Also, material on business practices, professional practices, and ethics is included. Students, working in teams, are involved in management and planning, analysis and specification, design, implementation, and testing of a software system. Project work is assessed using modern industrial software standards and review techniques. Laboratory work includes team building, project reports, walk-throughs and inspections, design activities, process analysis, and acceptance tests.

Prerequisites: SE 300, MA 444 or MA 453.

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Revisions are in red.

Academic Warning, Probation, Suspension, and Dismissal

Warning

A student whose cumulative grade point average (CGPA) is less than 2.00 for one term is placed on academic warning.

Probation

A student whose CGPA is less than 2.00 for two consecutive terms is placed on academic probation. Students ~~on warn-~~~~ing~~ or probation are classified as students not in good standing and may not serve as elected members of the Student Government Association, may not participate in intercollegiate athletics as members of a University team, may not serve on the editorial staff of a campus publication, and will lose eligibility for financial aid programs. The academic programs of students on warning or probation may be restricted. Students who are placed on academic probation will be allowed to complete any flight course in which they are currently enrolled. However, they will not be allowed to enroll in subsequent flight courses until they return to good academic standing. A student who has a term GPA of less than 1.00 may also be placed on academic probation or suspension in accordance with University academic policies.

Suspension

A student whose CGPA is less than 2.00 for three consecutive terms, or a student on academic probation whose CGPA at the end of the subsequent period is below 2.00, is suspended from the University unless the student maintains a term GPA greater than 2.00.

A student who has a term GPA of less than 1.00 may be suspended or placed on academic probation.

Dismissal

A student who has been suspended and readmitted is on probationary status until the CGPA has been raised to 2.00. If the term GPA falls below 2.00 during the probationary period, the student is dismissed. Any previously suspended student who has been restored to good standing but whose academic performance subsequently deteriorates to a level that would qualify for initial suspension is dismissed. Academic dismissal is final and the student will not be readmitted to the University.

When a change of grade or the conversion of the grade I changes a student's academic status, the previous academic status of warning, probation, or suspension is removed and does not become part of the student's permanent record.



Embry-Riddle Aeronautical University
Daytona Beach, FL Campus
600 S. Clyde Morris Blvd.
Daytona Beach, FL 32114-3900