SYLLABUS

Instructor: Dr. Cynthia Flores
Email: cynthia.flores@csuci.edu
Office: 2762 Bell Tower East
Office Hours: Monday 1:30pm-3:30pm, Wednesday 1:30pm-3:00pm, or by appointment
Course website is on Blackboard.
Course Meetings: Monday and Wednesday 12:00-1:15pm Bell Tower 1424

Text: (recommended) Ordinary Differential Equations, Author: Adkins, William A. Davidson, M, Publisher: Springer. The Broome Library provides this text in PDF format for free.

Catalog Description: Prerequisites: MATH 250 or Consent of Instructor

Course Objective: The outcome of this class will provide students the opportunity to develop mathematical models to describe certain physical systems (e.g., motion of a harmonic oscillator, predator-prey systems). The student will experience collaboration and constructive evaluation with colleagues, discussions, lectures and other in-class and out-of-class activities.

Student Learning Outcomes: Upon successful completion of the course, students will be able to

- use criteria for the existence and uniqueness of solutions of ordinary differential equations,
- analyze linear differential equations,
- use Laplace methods,
- discuss the basic properties of flows and diffeomorphisms, limit sets and iterations of maps,
- present concepts and techniques of Differential Equations and Dynamical Systems in oral and written form.

Expectations It is expected that you will attend class regularly. It is your responsibility to find out what material and announcements you missed during an absence. If you are transitioning into taking upper division courses, you may find yourself being held responsible for a lot more than you are used to. The instructor assumes that you are able to attend all classes and complete all assignments in a timely fashion. It is assumed that you will check the course website on Blackboard regularly for assignment instructions and for class announcements. You can expect to be treated equally and fairly.

Group Work Some group work may be required during class. Working in groups is a practical life skill. Please be courteous. Through the combination of lectures, discussions (small groups and the whole class), and other in-class activities, the classroom will become a special environment where the student will be asked to work collaboratively with their peers. They will come together to promote learning and growth by sharing ideas and applications, and constructively evaluating each other’s work.
Math 399 It is **strongly recommended** to be concurrently enrolled in Math 399 Advanced Math which takes place in OJAI 1964. Students may attend the labs on a need-basis, but you MUST be registered. Your add codes will be given during the first week of classes.

**Quizzes:** Expect a short quiz at the beginning of each lecture. Ensure your timely arrival to lecture as there will be no make-up quizzes. Your two lowest quiz grades will be dropped at the end of the semester.

**Midterm** Date: Wednesday, October 14, 2015. The Midterm will be administered in class.

**Final** Per the Final Exam Schedule, our final will take place Monday, December 14, 10:30am -12:30pm. More details to come.

You must take the midterm and Final Exam. There will be no make-up exams. The only excused absences from exams are official university approved absences.

The use of Calculators or books is NOT allowed during Quizzes and exams administered in class. The use of one 3 × 5 notecard with notes is allowed during in-class exams (not quizzes).

**Homework** There will be homework sets due each week. They may comprise of handwritten assignments or online assignments via WebWork. See Blackboard for more details. Absolutely NO LATE HOMEWORK will be accepted. Please see the CI Writing Guide for a thorough description of your writing responsibility. Go to [http://www.csuci.edu/writing-ci/guide/mathematics.htm](http://www.csuci.edu/writing-ci/guide/mathematics.htm).

**MATLAB** You may require using MATLAB to complete some assignments. This resource is available in the following computer labs: BT 1704, OJAI 1964, OJAI 1972, and North Hall 2555. It is also available at the STEM Center in El Dorado Hall. You may need to turn in a paper copy of .m-files. The Academic Dishonesty Policy (see below) is strongly enforced. You are encouraged to collaborate, however, the work you turn in must be your own. Absolutely NO copy/paste/simply-change-parameter-names will be tolerated.

**Software** We will use other software available online or on Blackboard in the course.

<table>
<thead>
<tr>
<th>Grading Scale</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
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<tr>
<td>Midterm</td>
<td>20%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>MATLAB project(s)</td>
<td>15%</td>
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<tr>
<td>Final</td>
<td>35%</td>
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**Course Grade**

- A= 90%-100%
- B=80%-89%
- C=70%-79%
- D=60%-69%
- F= 59% and below

Plus/minus grading will only be used in exceptional cases.

**Bonus Points** Although there are no “extra-credit” opportunities in this class, there are opportunities to receive bonus points. See Blackboard for more information.

**Cell Phones** The use of cell phones for any reason during exams and quizzes is not allowed and may result in loss of points. You are welcome to answer Poll Everywhere questions with your cell phone.

**Academic Dishonesty** By placing your name on a paper, you certify that the work is yours. During homework, quizzes or exams, copying, allowing copying, or having another person do your work for you
constitutes fraud and is prohibited by the law of the Educational Code. In study groups, ideas should be shared verbally. Avoid copying answers from tutors. If several students do this, their papers, being identical, will appear to be plagiarized. I am responsible to report instances of cheating to the Dean and give a student a grade of F for this work. For more information on the University policy, please see the University Catalog.

**Students with Disabilities** Please let me know in private about any disabilities or accommodations I should know of and please give me any paper work pertaining to them. Contact Education Access Center (EAC) if you have questions about disability accommodations.
Location: Bell Tower 1541
Email: accommodations@csuci.edu

**Tutoring/Extra Help** In this course, the student is responsible for seeking extra help from their peers (when collaboration is appropriate), the Math LAB (Math 399), and/or an appropriate tutoring center. The student may wish to utilize my office hours. Also you can get help at the STEM Center in El Dorado Hall. I am happy to provide guidance during my office hours.

- Math Lab OJAI 1964 Monday - Thursday Drop In Hours 3-4:15PM (You must sign up! See me for an add code)
- I.S.A. Kimberly Office Hours in Math Lab OJAI 1964 Wednesday 3-4:14PM & by appointment
- STEM Center Tutoring (see [www.csuci.edu/projectacceso](http://www.csuci.edu/projectacceso) for full schedule) Malina:
  - M: 1:00 - 4:00
  - T: 10:00 - 1:00
  - Th: 3:00- 6:00
  - F: 10:00 - 1:00

Information provided on this syllabus is subject to change.