

**Course Administration**

- INSTRUCTORS:** Shikui Chen, 163 Light Engineering, (631) 632-2309  
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- LECTURE HOURS:** Wednesday (4:00pm-6:50pm), PHYSICS P130
- OFFICE HOURS:** Monday and Wednesday (2:00pm-3:30pm)  
or by appointment.
- REQUIRED TEXT:** *Vibration Theory and Applications with Finite Elements and Active Vibration Control* by Alan Palazzolo, Wiley Publications.
- PREREQUISITE:** Undergraduate Level Dynamics
- HOMEWORK:** About one homework assignment per week. Each homework is due one week after it is assigned.
- Each homework must be turned in **at the beginning of the class** on the specified due date in order to be considered as on time.
  - Late homework will receive half credit before the solutions are posted and will **not** be accepted after that.
- EXAMS:** 1 Midterms (4:00pm-6:00pm, Wednesday, March 25, 2020)  
1 Final Exam (May 12-20, time TBD)
- All exams will be scheduled in class, unless otherwise stated
  - No makeup exam unless arranged prior to the exam.
- GRADING:**
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|-----------------------|-----|
| Homework              | 50% |
| 1 Midterm Exam        | 20% |
| Final (comprehensive) | 30% |
- BLACKBOARD:** All homework assignments will be posted on the Blackboard course account (<http://blackboard.sunysb.edu>). For problems logging in, go to the helpdesk in the Main Library SINC Site or the Union SINC Site, you can also call: 631-632-9602 or e-mail: [helpme@ic.sunysb.edu](mailto:helpme@ic.sunysb.edu)
- I use email and blackboard exclusively to communicate with you off class. It is your responsibility to make sure that your email id is a current one on the blackboard system. I suggest that you use a university email id for this class; it is free and official. I am not responsible for the emails not delivered to your commercially available email accounts.

**ACADEMIC HONESTY:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Instructors are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>

**SPECIAL NOTE ON ADA:** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation are confidential.

**CRITICAL INCIDENT MANAGEMENT** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

## Tentative Schedule

Week 1: Ch1: Introduction to Particle Dynamics (Review of particle kinematics, Newton's Law of Motion)

Week 2: No class (Labor day)

Week 3: Ch1: Introduction to Particle Dynamics (Review of particle kinematics, Newton's Law of Motion)

Week 4: Ch1: Introduction to Particle Dynamics (Work and Energy; Momentum and Impulse)

Week 4, 5: Ch2: Lagrange's equation

Week 6: Ch3: Kinematics of a rigid body

Week 7,8: Ch3: Dynamics of a rigid body

Week 9: Ch4: Equations of motion: differential approach

Week 10: Midterm Exam

Week 11, 12, 13: Ch4: Equations of motion: differential approach

Week 14: Ch5: Equations of motion: integral approach

Week 15: Review

Week 16: Final Exam