

| KIN 485 Biomechanics - Tentative Class Schedule - Fall 2009 | | | | | | |
|--|-------------|---|------------------|-----------|-----------------|-----------------|
| Day | Date | Class Topic | Reading | HW | Lab | Lab Sec# |
| Wed | 8/26 | Introduction. Research example | Ch 1; RES 74, 83 | | PC Software | 2 |
| Mon | 8/31 | Term Paper discussion; KA Software Intro | Ch 2, 3 | Proposal | PC Software | 1 |
| Wed | 9/2 | Kinematics - Vectors, Velocity | Ch 4, 5 | | Vectors | 2 |
| Mon | 9/7 | Labor Day | | | | |
| Wed | 9/9 | Kinematics - Acceleration | Ch 6, 7 | HW 1 | Vectors | 1* |
| Mon | 9/14 | Kinematics - projectile motion | Ch 8 | HW 2 | Projectiles | 1 |
| Wed | 9/16 | Kinematics - projectile motion | | HW 3 | Projectiles | 2 |
| Mon | 9/21 | Kinematic Analysis, Scale factor, KA chart | Ch 9; KAMan 1, 2 | HW 4 | KA/Excel | 1 |
| Wed | 9/23 | Kinematic Analysis velocity chart | KAMan 3, 4 | HW 5 | KA/Excel | 2 |
| Mon | 9/28 | Issues in Video Digitizing | KAMan 5, 6, 7 | HW 6 | GRF | 1 |
| Wed | 9/30 | Kinetics - Newton's laws | Ch 10 | | GRF | 2 |
| Mon | 10/5 | Video Data Collection Day | | | | x |
| Wed | 10/7 | Kinetics - External forces | Ch 11 | HW 7 | Ext. Force | 2 |
| Mon | 10/12 | Kinetics - External forces; Friction | | | Ext. Force | 1 |
| Wed | 10/14 | Kinetics - Momentum, Impact | Ch 12 | | Impulse | 2 |
| Mon | 10/19 | Kinetics - Impact, Work, Energy | Ch 13 | | Impulse | 1 |
| Wed | 10/21 | Angular Kinematics | Ch 14, 15, 16 | HW 8A | AngKinemat | 2 |
| Mon | 10/26 | no class | | | | |
| Wed | 10/28 | Exam #1 | | | AngKinemat | 1* |
| Mon | 11/2 | Angular Kinematics / Joint angles | Ch 17, 18, 19 | HW 8B | SumForce | 1 |
| Wed | 11/4 | Angular Kinetics - Intro, Moment of Inertia | Ch 20 | | SumForce | 2 |
| Mon | 11/9 | Veterans Day | | | | |
| Wed | 11/11 | JtCalc software | Ch 23 | | JtCalc | 2 |
| Mon | 11/16 | Torque Calculations | Ch 21 | | JtCalc | 1 |
| Wed | 11/18 | Angular Kinetics - Moment, CG. | | HW 9 | PaperPrep | 2 |
| Mon | 11/23 | Thanksgiving Break | | | | |
| Wed | 11/25 | Thanksgiving Break | | | | |
| Mon | 11/30 | Angular Kinetics - Angular Momentum | Ch 22 | HW 10 | PaperPrep | 1 |
| Wed | 12/2 | Data Review day | | | Eccentric Force | 2 |
| Mon | 12/7 | Fluid Mechanics | Ch 24 | | Eccentric Force | 1 |
| Wed | 12/9 | Swimming Biomechanics | Ch 25 | | Swimming | 2 |
| Mon | 12/14 | Swimming Biomechanics / Review | | Paper | Swimming | 1 |
| Mon | 12/21 | Final 8:00-10:30 | | | | |

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| * | Section 1 meets in the lab on Mondays, except for 9/9 and 10/28, when Section 1 attends lab on Wednesday |
| * | Section 2 meets in the lab on Wednesdays, except on 9/9 and 10/28 when there is no lab for Section 2. |