

---

## **Machine Design Analysis**

ME 356

University of Washington, Seattle

Winter Quarter 2017

---

---

**Location:** More 220  
Bagley 260

**Time:** Tu/Th 9:30-10:50am  
Th 2:30-5:20pm

**Instructor:** Prof. Nathan J. Sniadecki  
Associate Professor  
Associate Chair  
Mechanical Engineering  
Adjunct in Bioengineering  
Office: MEB 318  
Lab: Brotman 442  
Email: nsniadec@uw.edu

**Office Hours:**  
Tu 12:30-1:30pm (Prof, MEB 318)  
Tu 1:30-2:30pm (TAs, MEB 236)  
We 2:30-3:30pm (TAs, MEB 236)

**TAs:** Seong Joong Kahng sjkahng@uw.edu  
Garrett Allawatt gka86@uw.edu

**Website:** <http://courses.washington.edu/nsniadec/ME356/W17>

**Description:** Analysis, design, and selection of mechanical and electromechanical subsystems and elements, such as gears, linkages, cams, motors, and bearings.

**Prerequisites:** ME 354 – Mechanics of Materials Laboratory

**Textbook:** Budynas, R. G. & Nisbett, J.K., 2014, *Shigley's Mechanical Engineering Design, 10<sup>th</sup> Edition*, McGraw Hill, Upper Saddle Ridge, NJ (ISBN: 0131863126). Older versions or international versions are not supported. Use them at your own risk.

**Grading:** Homework (20%), Exam 1 (20%), Exam 2 (20%), Exam 3 (20%), Project (20%)  
Grade Scale: 95% = 4.0, 90% = 3.5, 85% = 3.0, 80% = 2.5, 75% = 2.0

### **Course Policies:**

*Lectures:* Please consider the learning mission of the course and refrain from activity that is disruptive during the lectures.

*Homework:* Please complete your assignments on engineering paper. Homework will be collected in class on Thursdays at 9:30am. Do not turn in your homework to the ME front office, the professor's office, or to the TAs. Late homework will be assessed a penalty: 25% off if 0-24 hours late or 50% off if 24-48 hours late. Late homework will not be accepted after 48 hours. Please make arrangements with Prof. Sniadecki to submit late homework.

*Collaboration:* Homework collaboration is permitted if both students acknowledge there was shared effort. If so, please list the name of your collaborators on your homework.

*Exams:* The three exams will be open book. Engineering calculators are permitted. Materials brought to the exam are subject to inspection. Only under proven and extraordinary circumstances will a makeup exam be permitted.

There is zero-tolerance for cheating or plagiarism. Please refer to the Academic Misconduct Policy.  
*<https://www.engr.washington.edu/mycoe/am/ampolicy>*

**SafeCampus:**

Preventing violence or self-harm is everyone's responsibility. If you're concerned for yourself or a friend, call SafeCampus @ 206-685-SAFE (7233).

Always call 911 if you or others may be in urgent danger.

Call 206-685-SAFE to report non-urgent threats of violence and for referrals to UW counseling and/or safety resources.

Don't walk alone. Campus safety guards can walk with you on campus after dark. Call Husky NightWalk 206-685-WALK (9255).

Stay connected in an emergency with UW Alert. Register your mobile number to receive instant notification of campus emergencies via text and voice messaging. Sign up online at [www.washington.edu/alert](http://www.washington.edu/alert)

For more information visit the SafeCampus website at [www.washington.edu/safecampus](http://www.washington.edu/safecampus).