

# ECEN 4013 Design of Engineering Systems

# **Agenda**

Conflict Resolution
Group Dynamics
Electrical Safety with Greg Hogan

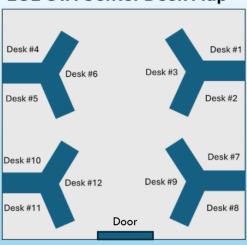


#### TA Schedule

# Welcome to the New Learning Hub ECE GTA Center (242 E5)

#### One-stop-to-meet-all

#### **ECE GTA Center Desk Map**



| Courses                                       | Instructor      | GTAs                                 | GTA Office Hour                       | Desks |
|---|-----------------|--------------------------------------|---------------------------------------|-------|
| ECEN2714 Fundamentals of Electric Circuits    | Dr. Yen         | Ethan Renard/Arastoo Salimi          | T 3:00PM - 4:30PM, W 8:45AM - 10:15AM | #5    |
| ECEN2233 Fundamentals of Digital Logic Design | Dr. Stine       | Thomas Kidd/Rachana Erra/Zach Wilson | M/W 5:00PM - 6:00PM                   | #2    |
| ECEN3714 Network Analysis                     | Dr. Y Zhang     | Sungjoo Chung                        | T/R 3:30PM - 5:00PM                   | #7    |
| ECEN3903 Semi-conductor                       | Dr. Piao        | Nafiseh Farahzadi                    | M/W 2:30 PM- 4:00 PM                  | #1    |
| ECEN4013 Senior Design I                      | Prof. Lannan    | Haya Monawwar                        | M/W 11:00AM- 12:30PM                  | #4    |
| ECEN4024 Capstone Design                      | Prof. Lannan    | Jikui Zhao                           | M/W 11:00AM- 12:30PM                  | #10   |
| ECEN3113 Energy, Environment & Economics      | Dr. Nazaripouya | Mahmuda Akter                        | T/R 3:00PM - 4:30PM                   | #11A  |
| ECEN3314 Electronics Device                   | Dr. Hu          | Haniye Mehraban/Azmeen Rahman        | W 12:30PM-1:30PM, R 12:00PM - 2:00PM  | #11B  |
| ECEN4313 Linear Electronics                   | Dr. Hu          | Saif Mostafa                         | T/R 1:00PM - 2:30PM                   | #12A  |
| ECEN4273 Software Engineering                 | Nate Lannan     | Cale England                         | R 3:00PM - 5:00PM                     | #12B  |
| ECEN4503 Probability & Statistics             | Dr. Cheng       | Md Mahudual Hasan                    | M/W 11:00PM - 12:30PM                 | #8A   |
| ECEN4613 Microwave Engineering                | Dr. O'Hara      | Brenden Martin                       | T/R 3:30PM-4:30PM                     | #8B   |
| ECEN3613 Applied Field I                      | Dr. W. Zhang    | Brooke Desai                         | T/R 1:30PM-2:30PM                     | #9A   |
| ECEN3623 Applied Field II                     | Dr. Bunting     | Carly Gotcher                        | M 10:30AM-12:30PM                     | #9B   |
| ECEN4010 Python Programming                   | Dr. Stine       | Thomas Kidd                          | M/W 3:30PM - 4:30PM                   | #3A   |
| ECEN3513 Signal Analysis                      | Dr. Young       | Ryan Lucas                           | M/W/F 1:30PM-2:30PM                   | #3B   |
| ECEN4010 Mobile Robotics                      | Dr. Sheng       | Zhanjie Chen                         | W/R 2:00PM - 3:00PM                   | #6A   |
| ECEN4303 Digital IC Design                    | Dr. Das         | Hridi Prova Debnath                  | T/R 3:00PM - 4:30PM                   | #6B   |
|   |                 |                                      |                                       |       |

## Undergraduate Research Opportunity

Dr. Shahriar Shahabuddin is looking for new undergraduate research students

- Did you enjoy Digital Logic Design?
- Do you feel comfortable using System Verilog and programming to an FPGA?

Contact Dr. Sha at shahriar.shahabuddin@okstate.edu

## Conflict resolution

Conflict and argument is a natural part group dynamics.

When conflict arises negotiation should take place.

#### Goals:

- Produce a solution all parties can agree to
- Work as quickly as possible to find a solution
- Improve not damage relationship between groups in conflict

#### 1. Understand the conflict

- Interests
  - What are my interests?
  - What do I want, what do I need?
  - What are my concerns, hopes, fears?
- Possible outcomes
  - What types of agreements might we reach?
- Legitimacy
  - What might convince both parties that the agreement is fair.
- Their interests
  - What might their interests be?
  - What might they want and need?
  - What are their concerns, hopes, and fears?

## 2. Calmly Communicate

- -Listen
  - You may not agree with them, but recognize what they are saying.
- Let everyone participate who wants to
- -Talk about emotions
- Do not react to emotional outbursts
  - Apologies are not costly and go a long way toward resolution
- -Be an active listener
  - Rephrase what has been said to affirm that you have heard and recognize it

#### 2. Calmly Communicate (cont.)

- Avoid targeting in speech
  - Avoid statements like "You haven't done anything all week!", and instead use "I am feeling frustrated that we haven't made any progress on the counter circuit this week"
- Be concrete but flexible
- Avoid judgements
- Work to find a solution together
  - Avoid throwing up your arms and saying "Well, it is up to you to find a solution now"
- Find a way to make their decision an easy one
  - Egos are real. Try to find a way that the other party can agree with you without looking weak or vulnerable

- 3. Brainstorm possible resolutions
  - Meet with entire group in an informal setting
  - The professor can act as an unbiased facilitator
  - Have a clear statement of what is to be brainstormed
  - Work on producing as many ideas as possible, do not judge or criticize yet. Maximize options.
  - -Look for win-win solutions

- 4. Choose the best resolution
  - Review the ideas and mark the best ones
  - –Set a time to discuss these solutions and determine which is best.
  - –Find the most mutually beneficial solution.

- 5. Use a third party mediator
  - This could be the professor, but this can add an intimidation factor that may not be beneficial
  - Mediators can be used for
    - Brainstorming and choosing a resolution
    - Setting ground rules
    - Suggesting compromises
    - Being a listener
    - Looking for win-win alternatives
    - Keeping both parties focused
    - Protecting the egos of both parties
    - Writing a draft of the agreement

# 6. Explore alternatives

- —At what point do you walk away from negotiations?
- –What are your alternatives if you cannot come to an agreement?
- -What alternatives might they have and how can you present choices that are better than their alternatives.

- 7. Coping with stressful situations and pressure tactics
  - What if they refuse to talk or meet with you?
  - What if they are putting extra pressure on you to make quick decisions that are in their favor?
  - Stay calm and go slow
  - Talk about the pressure tactic without judging
  - If they won't budge, treat their position as a real possibility. Ask lots of questions and listen to their logic. The more you know where they are coming from, the better the solution that you can create.
  - Decide on your best alternative and be prepared to walk away.

# Ideas for creating good group dynamics

- Enhance team culture
  - Hang out together in a setting that does not involve engineering and this class
  - Build a good communication structure
    - · Groupme, slack, wechat, discord ...
    - Convenience is key
  - Pay attention to each other and try to spot trouble before it is out of hand
  - You are part of a whole, and are connected by a common goal. Have pride in yourself and in your work.

# Questions?