Add us on Social Media!

@esciowastate

ENGINEERING STUDENT COUNCIL
IOWA STATE UNIVERSITY

Green Dot Outreach Opportunity

Megan Ziemann

mziemann@iastate.edu

Application for Build Space in AMSL

Submit your request for consideration of building space allocation at:
https://iastate.qualtrics.com/jfe/form/SV_egkqpxzbPMEO3vD

Applications for Fall 2020-Spring 2021 Academic Year. Access will begin April of 2020.

Applications due by March 9th, 5:00pm

Leadership Banquet

- Send photos of your club from the past year to: isu.esc.events@gmail.com

- Sign ups went out yesterday
  - 2 people per club
  - Due Friday, March 6
  - Sign up here

ESC Elections

- ESC Elections will take place at our next meeting (3/31)
  - See position descriptions and apply
    - https://forms.gle/exQwQADy1MHQ84oG8

Updates & Announcements

- Vote in the Student Government Election!! March 3 & 4
  - View minutes from the engineering senator debate here
- General Meetings
  - (3/31), (4/21) in Marston 2200 from 5:10-6p
- Office Hours
  - 11a-12p on Thursdays in Marston 1200
- Review ESC constitution updates at end of slides
  - Will vote on in March, need a 2/3rd majority to pass

Becoming an Engineer: Preconceived Notions

Engineering Diversity Programs
Dr. LeQuetia Ancar
Assistant Director of Student Services and Director of Multicultural Student Success
1300 Marston Hall | lancar@iastate.edu | 515-294-0690

Goals

- Gain knowledge of the demographics of our CyclONE community

- Gain a greater understanding of the definition of diversity and why inclusivity is important

- Recognize that a successful engineer must contribute towards creating an environment in which everyone is respected and valued

- Think critically about your environment and your role in it; Preconceived notions and microaggressions

- Learn ways in which you can strengthen your competency in Cultural Adaptability

Our Agreement

- Safe Space: Peer thoughts and opinions shared in this room remain anonymous
- Everyone's thoughts and opinions are valuable to the conversation
- Active participation and full engagement by everyone is expected and appreciated
- All questions are good questions
- We are <u>all</u> a work in progress
- Discomfort is ok; learning is occurring

Our Community

ISU Total Multicultural Undergrad: *4,318 (15.3% of 28,294 total ISU Undergrad)*

American Indian or Alaskan Native	53
Black	708
Asian	1,019
Native Hawaiian or Pacific Islander	17
Hispanic/Latino	1,778
Multiracial	743
International	1,501*
White	22,475

CoE Total Multicultural Undergrad: *1,110 (14.6% of 7,597 total CoE Undergrad)*

American Indian or Alaskan Native	15
Black	158
Asian	340
Native Hawaiian or Pacific Islander	3
Hispanic/Latino	415
Multiracial	179
International	564*
White	5,923

CoE Total Female Undergrad: *1,244 (16.4% of 7,597 total CoE Undergrad)*

*Not included in Multicultural Student Totals

Based on Fall 2019 Enrollment Data from the Office of the Registrar
http://www.registrar.iastate.edu/enrollment

IOWA STATE UNIVERSITY   **College of Engineering**

Our Community

FALL SEMESTER 2019 ENROLLMENT

College of Engineering	Total	Male	Female	Minorities* 1	2	4	5	6	7	Resident	Non-resident	Inter-national
Aerospace Engineering	986	882	104	3	17	39		52	14	341	588	57
Agricultural Engineering	214	191	23		1	1		5	2	130	78	6
Biological Systems Engineering	98	45	53		2	7		4	4	45	46	7
Chemical Engineering	623	430	193		15	40		35	11	254	320	49
Civil Engineering	633	487	146	1	14	14	1	46	11	291	296	46
Computer Engineering	696	631	65	4	12	62	1	36	22	354	276	66
Construction Engineering	281	247	34		5	2		11	4	176	104	1
Cyber Security Engineering	76	65	11		2	3		6	4	53	22	1
Electrical Engineering	539	475	64	1	26	28		31	9	232	228	79
Engineering	313	247	66	1	3	11		18	9	170	140	3
Engineering Specials (Non-Degree)	41	35	6		2	1		1		4	7	30
Industrial Engineering	480	341	139	1	12	18		30	19	204	239	37
Materials Engineering	201	149	52	1	2	5		10	4	82	109	10
Mechanical Engineering	2000	1770	230	2	32	81	1	102	46	817	1039	144
Software Engineering	416	358	58	1	13	28		28	20	237	151	28
Total	7597	6353	1244	15	158	340	3	415	179	3390	3643	564

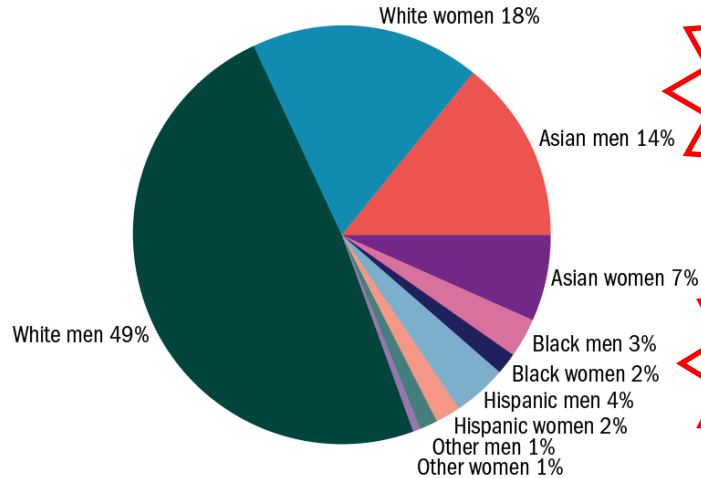*Includes U.S. Citizens, Immigrants, Refugees and Asylees only.
1 = American Indian or Alaskan Native
2 = Black
4 = Asian
5 = Native Hawaiian or Pacific Islander
6 = Hispanic/Latino of any race
7 = Two or more races

Based on Fall 2019 Enrollment Data from the Office of the Registrar
http://www.registrar.iastate.edu/enrollment

IOWA STATE UNIVERSITY

College of Engineering

Our Community (Industry)

Scientists and engineers working in science and engineering occupations: 2015

White women 18%
Asian men 14%
Asian women 7%
White men 49%
Black men 3%
Black women 2%
Hispanic men 4%
Hispanic women 2%
Other men 1%
Other women 1%

30% Women

34% People of Color

NOTES: Hispanic may be any race. Other includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and multiple race. *Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017*

Based on National Science Foundation, National Center for Science and Engineering Statistics. 2017. *Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017.* Special Report NSF 17-310. Arlington, VA
www.nsf.gov/statistics/2017/nsf17310/digest/about-this-report/

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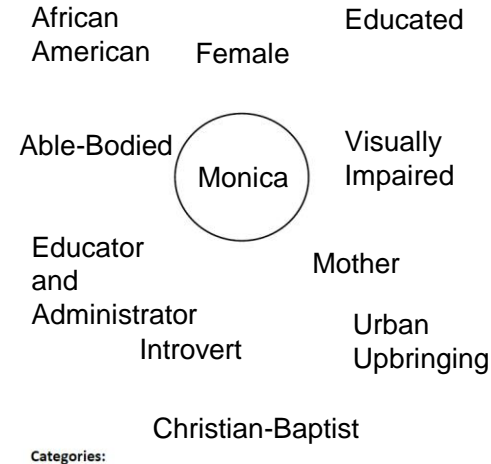
College of Engineering
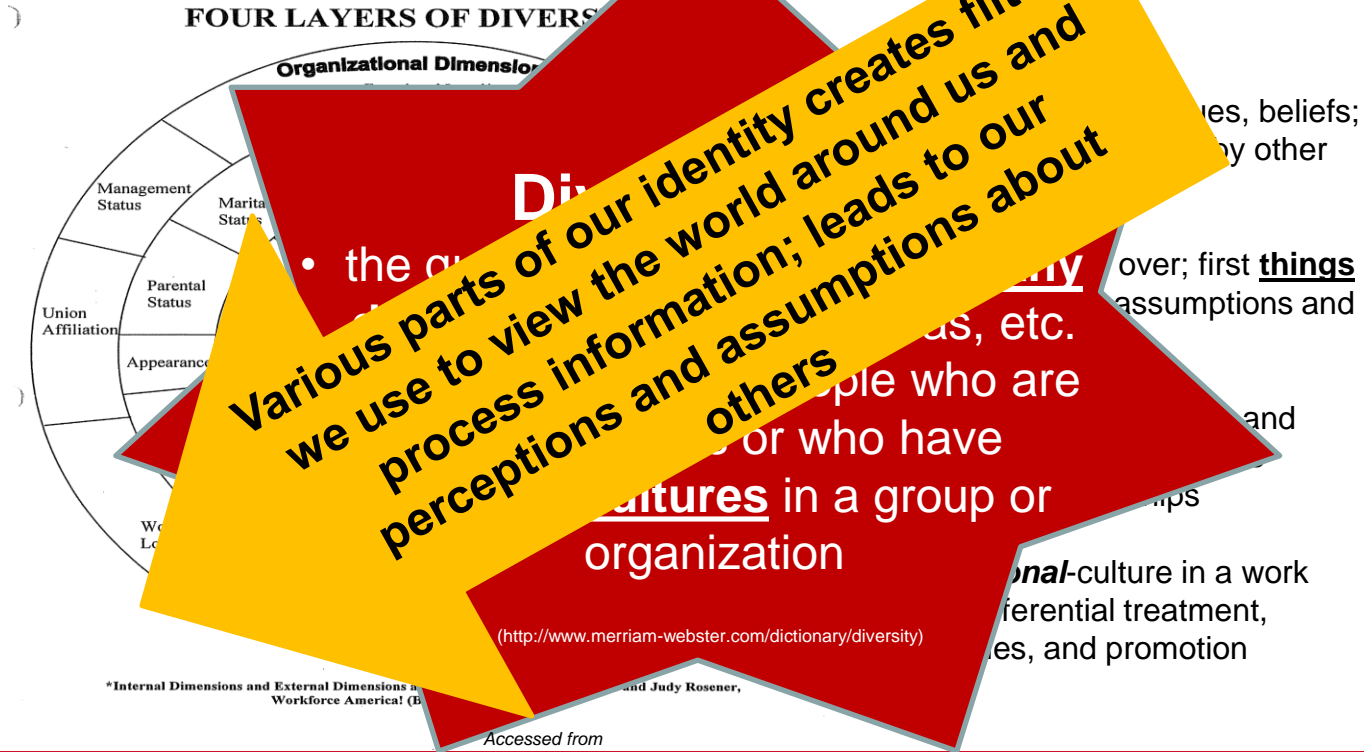
Diversity. What is it?

Diversity Defined

Activity:

- Write your name in the circle

- Surrounding your name, write 10 (or more) attributes/characteristics that best describe you

- In groups of 3-4, share and compile your attributes/characteristics into categories

- Share your categories (dimensions of diversity) and their make up with the larger group

Diversity Defined: ME
LEAD Diversity Programs
College of Engineering

African American   Educated

Female

Able-Bodied   Monica   Visually Impaired

Educator and Administrator   Mother

Introvert   Urban Upbringing

Christian-Baptist

Categories:

LEAD
LEADERSHIP THROUGH ENGINEERING
ACADEMIC DIVERSITY

FOUR LAYERS OF DIVERS...

Organizational Dimension...

Management Status
Marital Status
Parental Status
Union Affiliation
Appearance

...es, beliefs; ...y other

...over; first **things** ...assumptions and

Di...

- the qu...
- ...s, etc.
- ...ple who are ...or who have **...tures** in a group or organization

...and ...ps

...**onal**-culture in a work ...ferential treatment, ...es, and promotion

(http://www.merriam-webster.com/dictionary/diversity)

Various parts of our identity creates filters we use to view the world around us and process information; leads to our perceptions and assumptions about others

Internal Dimensions and External Dimensions a... and Judy Rosener, Workforce America! (B...

Accessed from www.lacrosseconsortium.org/uploads/content_files/Dimensions_of_Diversity_Wheel_Expanded.pdf

IOWA STATE UNIVERSITY

College of Engineering

Preconceived Notions

IOWA STATE UNIVERSITY   College of Engineering

Preconceived Notions

Scenario: You are given the opportunity to select the team leader for your interdisciplinary senior design project that will lead to a full-time job with your dream company.

- Review the team leader profiles
- Rank order your preferences 1-4
- List as many attributes, phrases, characteristics, etc. that you attribute to the team leader based on their profile and list reasons why you chose them
- Move to the area of the room where your 1st preference for a team leader is posted
- Within small groups, share why you chose your leader

Preconceived Notions

Team Leader Profiles

**Michael
White
Male
Industrial Engineer**

**Chevonna
African American
Female
Aerospace Engineer**

**Joseph
Asian American
Transgender Male
Mechanical Engineer**

**Gloria
Latinx
Female
Ag Engineer**

Preconceived Notions

Reflect and Discuss (TTYP: Turn To Your Partner):

- Initial thoughts/reactions to activity?
- Why did you choose your first team leader?
  - What characteristics did you associate with this team leader?
  - Why didn't you choose the other team leaders?

- What assumptions did you make?
  - Why did you make these assumptions? What "truths" were these assumptions based on? Where did you learn these "truths"?

Preconceived Notions

- **Preconceived _____ ies/Assumptions (Thought_____**

- **Micro_____**

  – Ev_____ _____onmental
  snu_____ _____nigrating
  mes_____ _____tentional,
  that _____ or **negative**
  messag_____ _____eir **identity**
  (gender, eth_____ _____ual orientation,
  ability, etc.)

Adapted from "Microaggressions in Everyday Life: Race, Gender and Sexual Orientation" by Derald Wing Sue (2010)

Microagressions

- Asking a peer of color "where are you from?"
- Asking a multiracial peer "what are you?"
- Telling an Asian American peer "you speak English very well"
- Continuously mispronouncing a team member's name that is non-English based
- Telling a peer of color "I don't see race"
- Being a female student in an upper level engineering class and often overlooked when the class is asked a question or when working in teams; being delegated to secretarial tasks
- Addressing a mixed gender group of peers as "you guys"

Adapted from "Microaggressions in Everyday Life: Race, Gender and Sexual Orientation" by Derald Wing Sue (2010)

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Microagressions

- Telling a female pee~~tha~~ ~~rely~~ got a job opportunity because of ~~h~~
- Stating ~~~~ if they worked ~~~~
- Mi~~~~ or st~~~~ d of D~~~~
- As~~~~ nder the a~~~~ bject area
- Choosing not ~~~~ peers that don't look like y~~~~
- Among MANY others…

Adapted from "Microaggressions in Everyday Life: Race, Gender and Sexual Orientation" by Derald Wing Sue (2010)

What you SAY and DO matters!!!

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So What? Now What?

Why Should You Care?

- **Industry Expects It!**
- **Engineering Workplace Competencies**
  - Key knowledge, skills, behaviors and motivations identified by stakeholders as important for success in the engineering workplace
  - Evaluated by student and employer during internship and coop experiences
  - Analysis and Judgement, Communication, Continuous Learning, **Cultural Adaptability**, Customer Focus, Engineering/Technical Knowledge, General Knowledge, Initiative, Innovation, Integrity, Planning, Professional Impact, Quality Orientation, Safety Awareness, Teamwork
- **Cultural Adaptability**
  - *Being open to and making changes to accommodate the differences found in other cultures in order to interact effectively with individuals and groups from a different cultural background.*
    - Key Actions:
      - Demonstrates inclusive behavior.
      - Exhibits sensitivity.
      - Adapts behavior to other cultures.
      - Adapts products and processes to cultural concerns.

Based on Iowa State University Engineering Workplace Competencies

IOWA STATE UNIVERSITY

College of Engineering

Why Should You Care?

- **Iowa State University Strategic Plan 2017-2022**
  - *Goal 4: Continue to enhance and cultivate the ISU Experience where faculty, staff, students, and visitors are safe and feel welcomed, supported, included, and valued by the university and each other.*

- **ISU Principles of Community**
  - *Richness of Diversity: We recognize and cherish the richness of diversity in our university experience. Furthermore, we strive to increase the diversity of ideas, cultures and experiences throughout the university community. (https://vimeo.com/284865159)*

- **College of Engineering Mission and Vision**
  - *Foster an inclusive and creative environment that promotes scholarship and learning*

- **It's the SMART thing to do?!**
  - Diversity, **Equity, and Inclusion**
  - Businesses, classrooms, products, science, research…better with greater diversity and inclusion of diverse people/perspectives

Putting it into Practice

- Know who you are; what assumptions/biases you bring into your academic, professional, and social spaces based on your experiences (culture)
- How diverse is your sphere of influence (organization) or friend group? Get involved in diverse experiences that take you outside of your comfort zone; Get to know people that don't look and act like you
  - Be "Color Brave" (Mellody Hobson); speaking openly about race — and particularly about diversity…makes for better businesses and a better society.
    http://www.ted.com/talks/mellody_hobson_color_blind_or_color_brave
- Learn about diverse populations (read *The Spark* or *The Hype*); take a class (Dialogues on Diversity); attend a speaker through the Lectures Program; participate in a conference (ISCORE: Iowa State Conference on Race and Ethnicity, Social Justice Institute, etc.); join a conversation (Campus Conversations through VPDI Office)

Putting it into Practice

- Get to know people for who they are; build community and connections

- Value and embrace diverse perspectives

- Bring awareness; Address bias/assumptions and microaggressions when they occur

- Be a change agent! Don't be afraid to talk about "it" and question the status quo; START a conversation

- Provide support; Listen and affirm experiences

- SEE something, SAY something
  - Campus Climate Reporting System
    - https://www.campusclimate.iastate.edu/reporting

- Serve as an ally and/or advocate

Challenge: Put it into Practice

- **What will you do** to check your preconceived notions (bias)?

- **How will you further develop** your knowledge of and experience with diversity, equity, and inclusion?

Questions, Comments, Concerns?
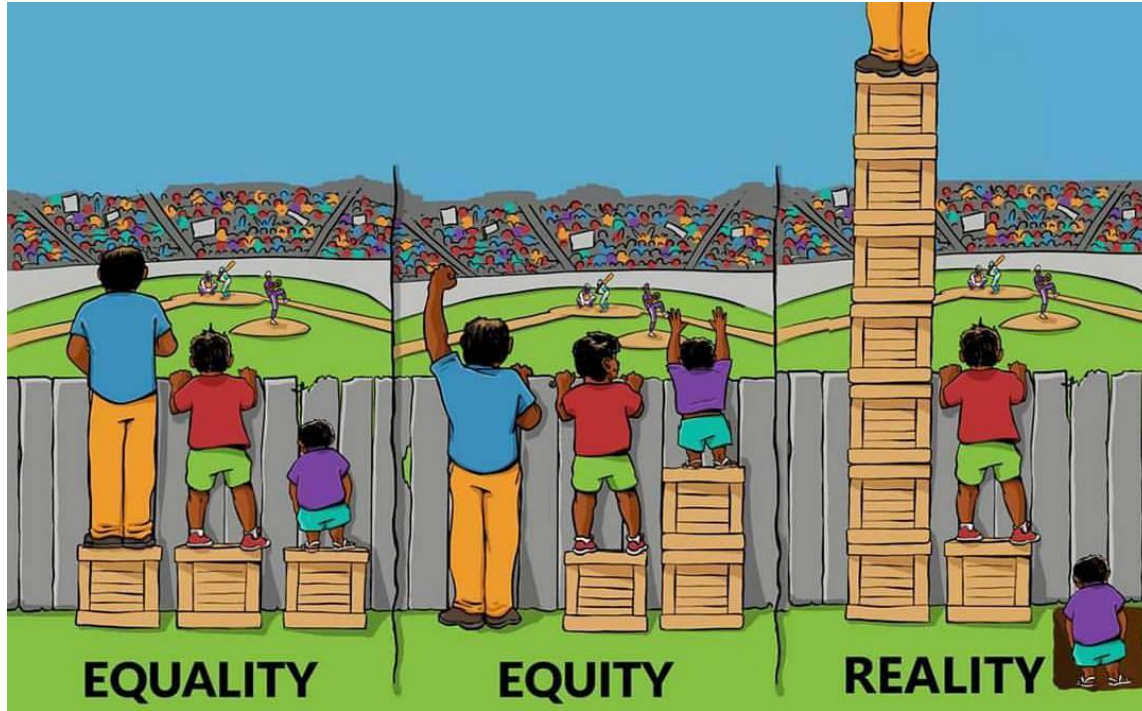
EQUALITY   EQUITY   REALITY

Chevonna

African American

Female

Aerospace Engineer

ESC Constitutional Updates

1. President/Co-Presidents
   1.1. Oversee the Executive Board
   1.2. Preside over both General Body and executive meetings
   1.3. Schedule meetings with the Dean of Engineering and ESC's advisor at least twice a semester
   1.4. Present an annual budget and request for funding to the Dean of Engineering by October 1
   1.5. Represent ESC to StuGov

2. Vice President of Administration (Risk Management Officer)
   2.1. Assume the duties of the President in his/her absence.
   2.2. Schedule both General Body and executive meetings
   2.3. Record attendance at executive and general meetings
   2.4. Create and maintain ESC contact platforms
   2.5. Register and plan activities for Destination Iowa State (DIS) and ClubFest
   2.6. Recommend risk management policies or procedures to ESC

ESC Constitutional Updates

5. Vice President of Outreach
   5.1. Preside over the Outreach committee if applicable
   5.2. Plan Fall and Spring Outreach events
   5.3. Work in conjunction with the Vice President of Events
   5.4. File appropriate Risk management paperwork for the organization's outreach events
   5.5. Coordinate with and assist the Engineering Outreach Office

6. Vice President of Communications
   6.1. Maintain ESC's website
   6.2. Publish a newsletter on, at least, a semester basis
   6.3. Maintain social media accounts (Facebook, Instagram, Snapchat, Twitter)
   6.4. Publicize meeting minutes in a timely fashion
   6.5. Assist the other Vice Presidents with publicity as necessary
   6.6. Preside over the Communication committee if applicable
   6.7. Manage and maintain correspondence with sponsored clubs
   6.8. Monitor the trademark surveys and submitted logos
   6.9. Act as liaison between Trademark and the club