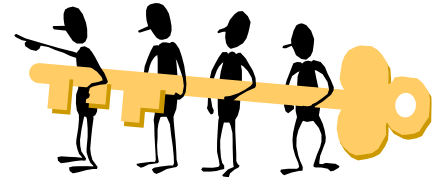


Preparing for the PE Exam Tips for Success!!



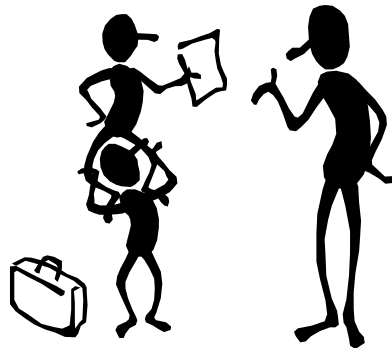
Tom Roberts, P.E., F.NSPE w/Panelists:
Jared Loomis, P.E., Keithen Meyer, P.E.,
Jared Rogers, P.E., Ryan Yenni, P.E.

KSPE Young Engineer's Roundtable
June 24, 2021

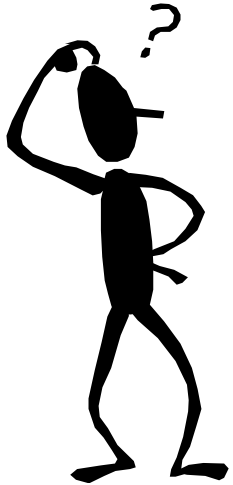
WHY LICENSURE ??

- **Protect Public Health & Safety**
- **Establish Minimal Competence**
- **Expand Your Career Options**
- **Promote Professional**

Development



SESSION AGENDA



- **Exam Format**
- **Test Taking Strategies**
- **Exam Preparation**
- **Panel Discussion**

PE EXAM FORMAT

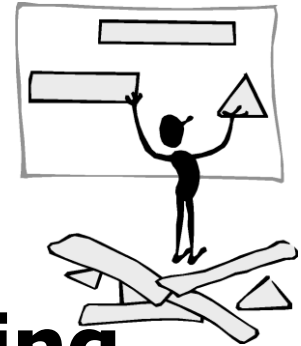


CBT or Pencil/Paper Examinations

- **Exams developed by:**  **NCEES**
(National Council of Examiners
for Engineering & Surveying)
*advancing licensure for
engineers and surveyors*
- **Questions developed by
technical society volunteers**
- **Administered for each State/Territory
by a local testing agency**
- **Results are licensed state by state**

2021 Pencil & Paper Disciplines

- **Civil (all modules)**
 - **Control Systems**
 - **Metallurgical & Materials**
 - **16 Hour Structural Engineering**
-
- **All other disciplines are CBT
(Computer Based Testing)**



Go to www.ncees.org for details

CBT Disciplines



- **Some disciplines are year-round:
ChE, EECE-Power, Environmental
& ME (all modules)**
- **Other disciplines on a specific date:
BAE, ARE, Computer Engineering,
Fire Protection, IMSE, Mining, NE
& Petroleum**

Go to www.ncees.org for details

PE EXAM FORMAT



All Examinations: ~8 to 8.5 hours

➤ **Two Sections - AM & PM**

with a 50 min break

➤ **80 to 85 Multiple Choice Questions**

May Include Multiple Correct, Point

& Click, Drag & Drop, Fill-in-the-Blank

- Each Question ~ 2.5 points each

- Manage your time

- don't get trapped

4 HOUR AM & PM SESSIONS

USE THE 10 – 50 – 20 RULE:

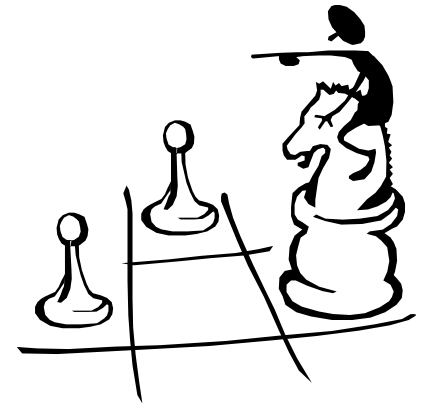
- **First 10 Minutes -**
 - Look Over the Entire Exam & Prioritize Topics**
- **Work in 50 Minute Segments**
 - ~2 Minutes per Question**
 - Work Easiest Segments First**
 - Save Hardest Until Last**
- **Use the Last 20 Minutes to Finish**
 - No Penalty for Guessing !!**
 - Don't Second Guess Yourself**



EXAM TOPICS (Example EECE)

17 Different Topic Areas:

- **Mathematics (11 Questions)**
- **Probability & Statistics**
- **Ethics & Professional Practice**
- **Circuit Analysis (11 Questions)**
- **Electric Materials, Linear Systems**
- **Signal Processing, Electronics**
- **Power Systems, Electromagnetics**
- **Control Systems, etc., etc.**



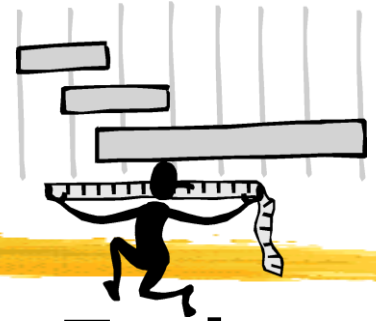
GRADING THE EXAM

The Exam is "Pass/Fail"

- Machine Graded – Fill in the Oval
- Red/White Mechanical Pencils Issued
- Not Graded on the Curve
- Angoff Procedure to Determine Cutoff Point
- Equating subtest is used
- Most States Use NCEES Suggested Pass
- Pencil/Paper Takes 12 – 14 Weeks
- Not Given Passing Score – only Failing Score

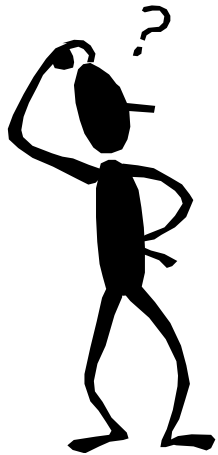


STUDY TECHNIQUES



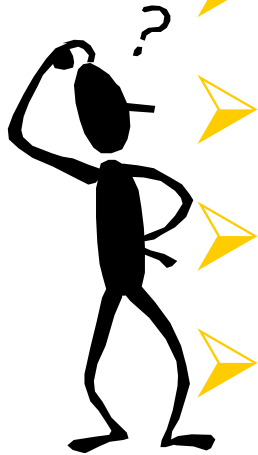
- **Look at Calendar & Prioritize Exam Topics**
- **Use Study Books/Do Practice Problems**
- **Use NCEES Reference Handbook**
- **Be Selective about Problems**
 - **Work all Types in all Topics**
 - **Don't Just Start Working Problems 1 – 60**
(e.g., Select 1, 6, 15, 35, 44, & 56)
- **Practice Speed – Use a Timer**
- **Use English or SI to Check Answers**

WHAT TO TAKE



- **Arrive on Time (Early)**
- **Approval Letter & ID Number**
- **Govt. Issue Photo ID
(Names Must Match)**
- **Calculator & Extra Battery
(quiet/no keyboard – **see list**)**
- **Extra Car Keys !**
- **Lunch/Snacks/Water (Clear Bag)**

DO NOT TAKE



- **Writing Instrument / Eraser**
- **Reference Materials**
- **Post-its, Paperclips, etc.**
- **Purses / Backpacks**
- **Communication Devices**
(i.e., pagers & cell phones)
- **Hats & Inappropriate Clothing**
- **Cologne or Perfume**

SUMMARY

Introduction Included:

- Exam Format
- Test Taking Strategies
- Exam Preparation

Questions ???

- Panel Discussion

