SENIOR DESIGN

POINTER AND EXPERIENCES

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Senior design advisors
- John Vesecky
- Stephen Petersen
- David Munay
Autonomous Hive Mind

- Create three robots that will cooperatively traverse a maze and look for a “human” or “fire”
- As they move across the field, a host laptop will display an image of data received
Being a Team (friendly)

- If you can help it, work with people you can work with
  - If you can’t, make the best of it
- Let each other know when you think someone’s doing good work
- Respect one another
- Bond as a team
Being a team (business)

- Everyone must have a purpose at all times
  - A REAL purpose - don’t waste time
- Have people on tasks that make sense for them
  - Don’t waste a super-star
- Know what your teammates are working on
  - Make regular use of the gantt chart
- Keep a sign in sheet
- Be very serious about team standards
Management

- Should know what everyone’s current goals and deadlines are
- Should know who is working with who
- Should not overbook his or herself
- Must be open to ideas and be encouraging
- Must be willing to say things people do not want to hear
Meetings

- Make an agenda
- Schedule and never skip
- Different types require different things
  - With your team
  - With your advisors
  - With your sponsor
- Be prepared no matter what your role
- Run your own meetings
Lab space

- Respect your lab space
  - Clutter, work space, food, etc
- Respect other’s space
  - Teammates, other teams, old teams
- Lighten up the atmosphere
- Leave lab/baskin
Presentations

- Dress appropriately
- Mind your body language
- Project your voice
- Be aware of your verbal ticks
- Be clean, not fancy
- Have the finer parts ironed out
- Know everyone’s parts
- Practice
Budget

- Start looking into parts ASAP
- Be prepared to pay out of pocket
  - Apply for funding as early as possible
- Have your parts by the start of 123B
- Clear what you’re buying with the whole team
- Document all spendings and keep all receipts
  - Excel, binder, etc
- Have a treasurer
General Productivity

- Communicate with your professors/TA
- Get in early and leave in the evening
  - Expect to work 50 hour weeks for this class alone
- Don’t reinvent the wheel
- Stash food in lab
  - And it eat outside of lab
- Keep lab notebook updated
- Ask obvious questions
Self-checks

- “Do we really need that?”
- “Do we even have time for that?”
- Be conscious of the message you are transmitting
  - “What kind of response am I looking for?”
  - Sell it to them
Strive to be the team that all other teams are compared to.