



GEODESIGN AS A MULTISCALE GLOBAL ENTERPRISE

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Geodesign Summit Europe

1-2 November, 2016

USCDornsife

Dana and David Dornsife
College of Letters, Arts and Sciences

Spatial Sciences Institute



Outline

- Spatial as an enabling discipline
- Geodesign Summit 2012
- B.S. in Geodesign
 - SSCI 350: International Geodesign
 - SSCI 412: Geodesign Practicum
- Student response
- Millennials
- Global challenges | Opportunities
 - California
 - The Netherlands
 - China
- Geodesign as a global enterprise
- Close | Questions



Spatial ... as an enabling science

- Agronomy
- Archaeology
- Architecture
- Civil Engineering
- Data Science
- Economics
- Environmental Science
- Epidemiology
- Geodesign**
- Geography
- Geology
- Hydrology
- ...
- ...
- ...
- Landscape Architecture
- Oceanography
- Political Science
- Soil Science
- Zoology

Use Cases



Spatial Sciences

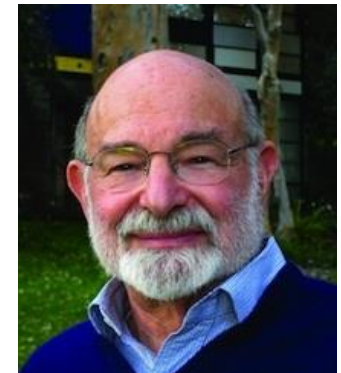
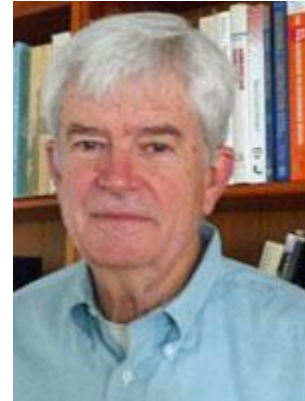
- Poverty
- Food & Water Security
- Obesity
- Social Justice Issues
- Cancer
- Sustainability & Climate Change
- Terrorism
- Cyber Security
- Aging
- Dementia

Wicked Problems



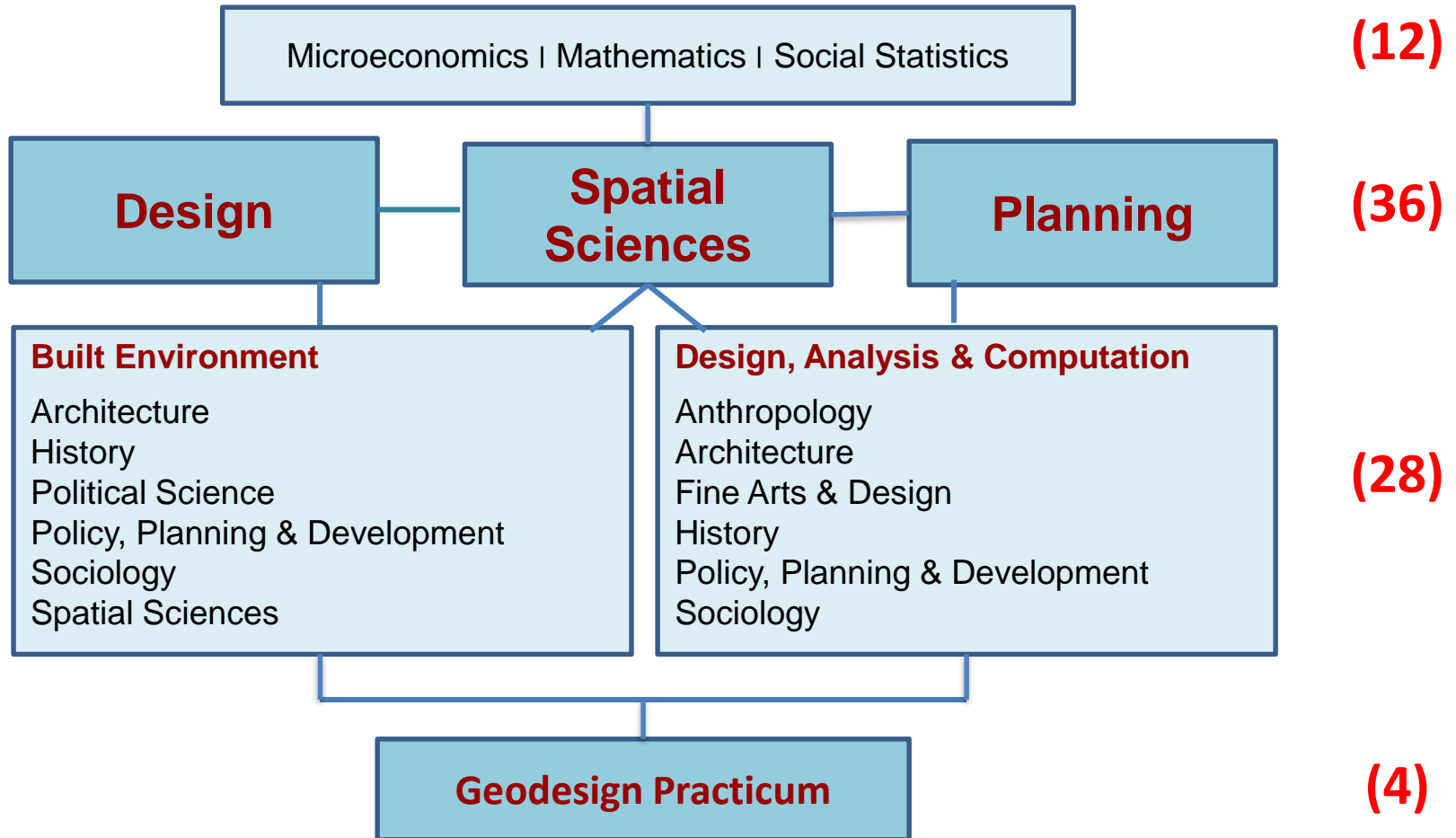
Geodesign Summit – 2012

- 2010 – USC Spatial Sciences Institute established
- 2010 – M.S. & GC in Geographic Information Science & Technology
- 2013 – Minor in Spatial Studies
- **2013 – B.S. in Geodesign**
- 2014 – GC in Geospatial Intelligence
- 2015 – GC in Geospatial Leadership
- 2016 – M.S. in Spatial Informatics
- 2016 – Ph.D. in Population, Health & Place
- 2016 – Minor in Human Security & Geospatial Intelligence





B.S. in Geodesign – Curriculum





SSCI 350: International Geodesign



USC Problems Without Passports (PWP) Program





SSCI 412: Geodesign Practicum

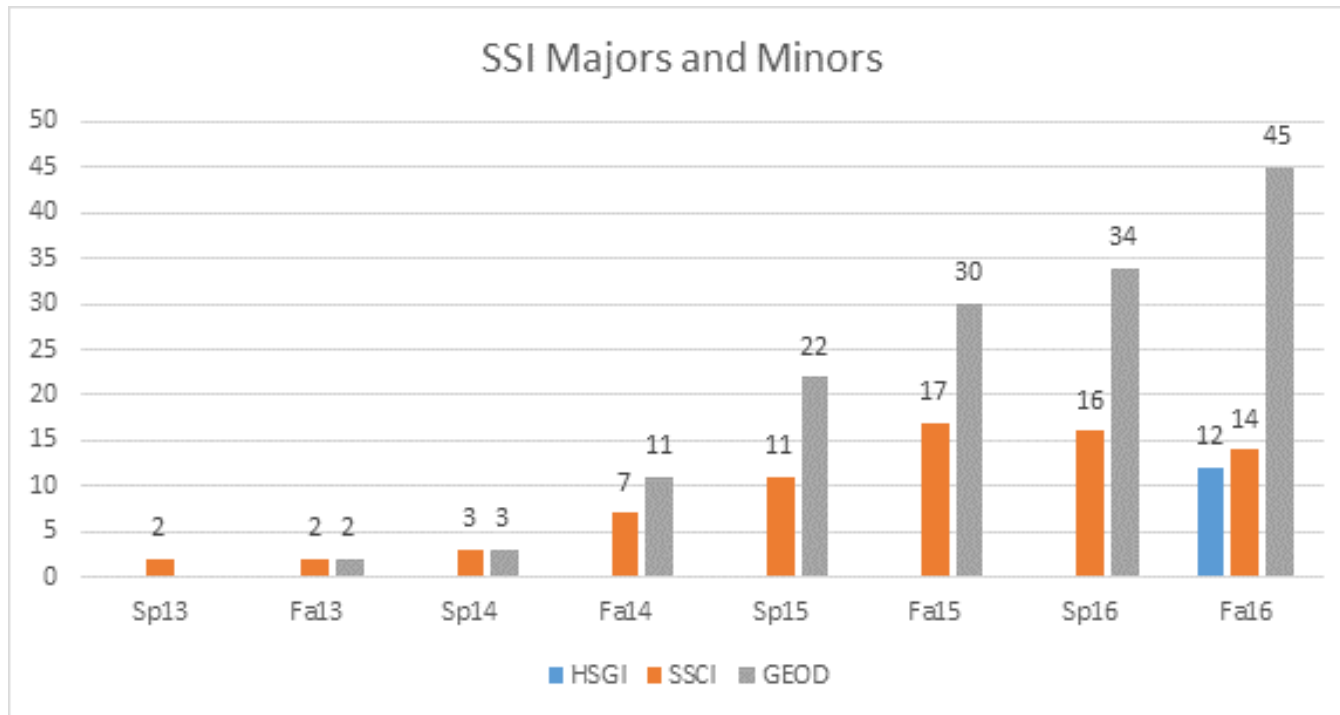


Developing a plan and project ideas for recovery of endangered Palos Verdes blue butterfly for an external client, the Disney Conservation Fund





Student Response

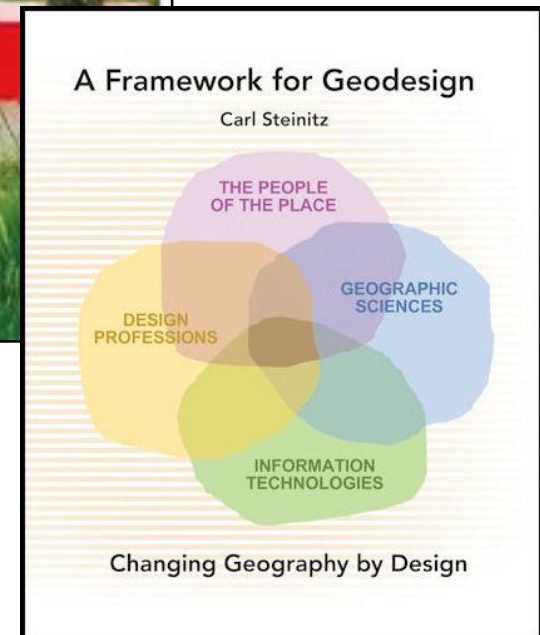


- 14 first majors
- 27 students changed majors
- 4 double majors
- 1 Trustee, 5 Presidential, & 2 Dean's Scholars
- 21 students made Dean's List in Spring 2016



Self Assessment

- **Geodesign principles**
- Practice of Geodesign
- Urban applications in U.S.





Self Assessment

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Self Assessment

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- Practice of Geodesign
- **Urban applications in U.S.**



China (3)
Myanmar (2)
Spain
Taiwan

California (23)
Illinois (3)
Missouri (2)
Washington (2)
+8 other states





Millennials ...



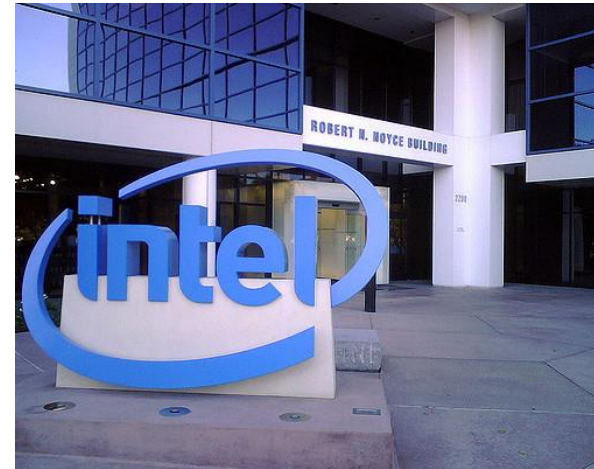


Central Valley, California





Silicon Valley, California





Los Angeles County

12.8 million

4,850 mi²





Los Angeles County ...

61 stations

8 lines





Bend, Oregon



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The Netherlands ...





The Netherlands | Bicycles



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The Netherlands | Life Style





China | Shanghai





China | Beijing





China | Rice paddies





Geodesign as a Global Enterprise

- New opportunities to tackle serious & enduring global challenges
 - Biological conservation
 - Climate change
 - Sustainability
- New opportunities for learning
 - To learn from one another
 - To learn how to connect individual & collective action across multiple cultures & settings
 - To learn how to inspire global citizens, thinkers, & actors





Close || Questions



SSCI 350: International Geodesign

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CLOSE | 26

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