



ESTABLISHING A B.S. IN GEODESIGN TO FOSTER INTERDISCIPLINARY COLLABORATION

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Geodesign Summit

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Spatial Sciences Institute



Spatial Sciences Institute

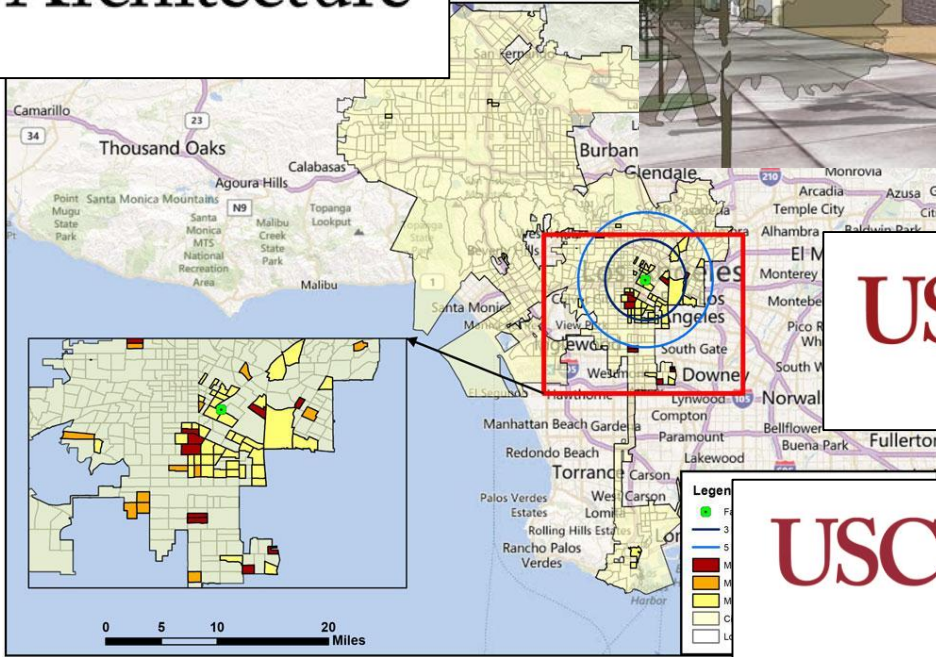
- Established 1st July, 2010
- Rapid growth
- People
 - 15 core faculty
 - 21 faculty affiliates
 - 7 staff
- Facilities
 - Faculty & staff offices
 - Dedicated classrooms & laboratories
 - Large computing infrastructure
- Substantial research enterprise
- Full suite of academic programs





B.S. in Geodesign

USC School
of Architecture



USC Price
Sol Price School of Public Policy

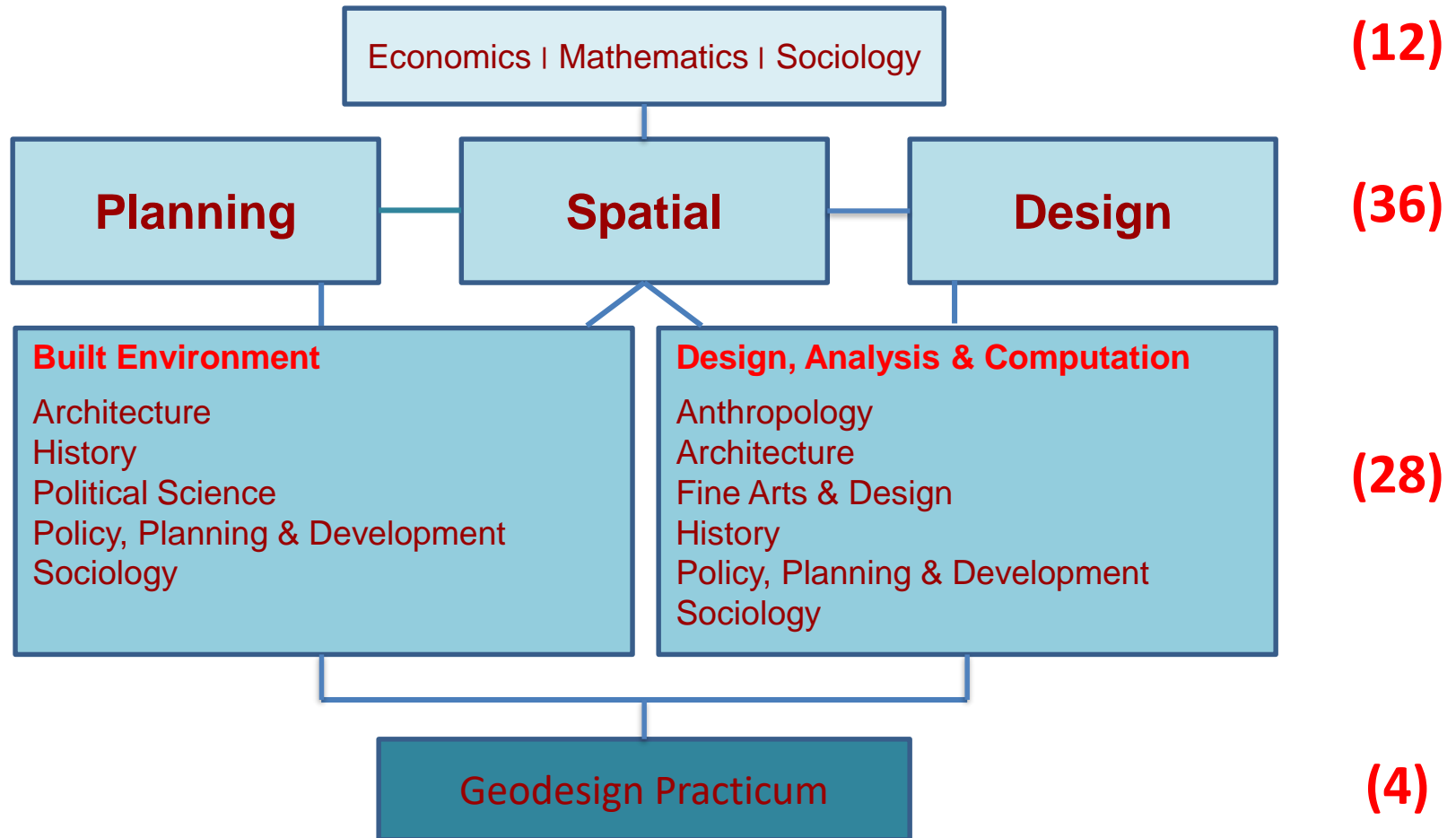
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Geodesign Curriculum





Geodesign Core

Planning

PPD 227 – Urban Planning and Development
PPD 417 – History of Planning and Development
PPD 425 – Designing Livable Communities

Spatial

SSCI 301 – Maps and Spatial Reasoning
SSCI 382 – Principles of Geographic Information Science
SSCI 483 – Spatial Science Practicum

Design

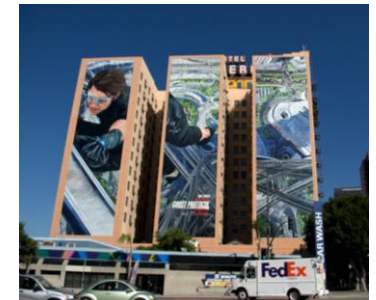
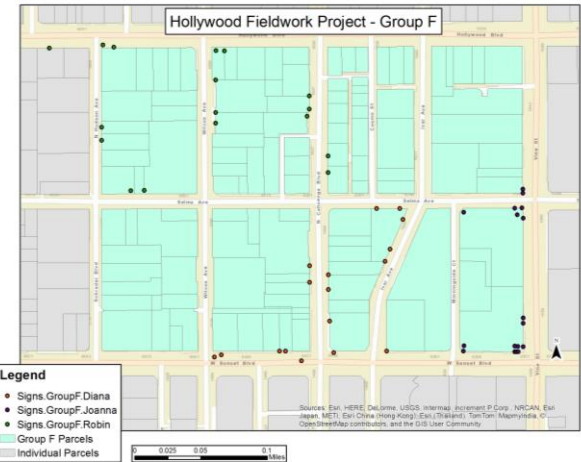
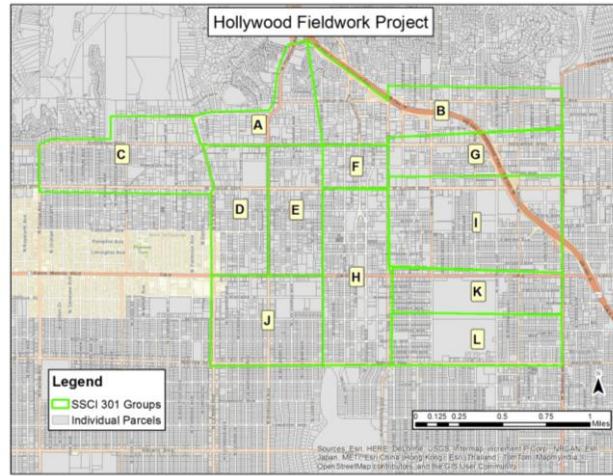
ARCH 203 – Visualizing and Experiencing the Built Environment
ARCH 303 – Principles of Spatial Design I
ARCH 303 – Principles of Spatial Design II

Capstone

ARCH-PPD-SSCI 412 – Geodesign Practicum

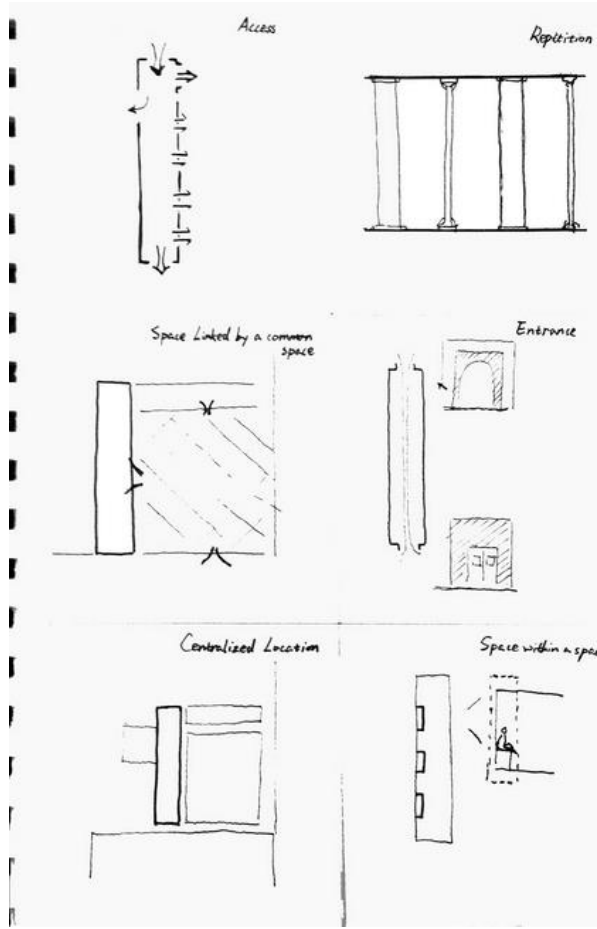
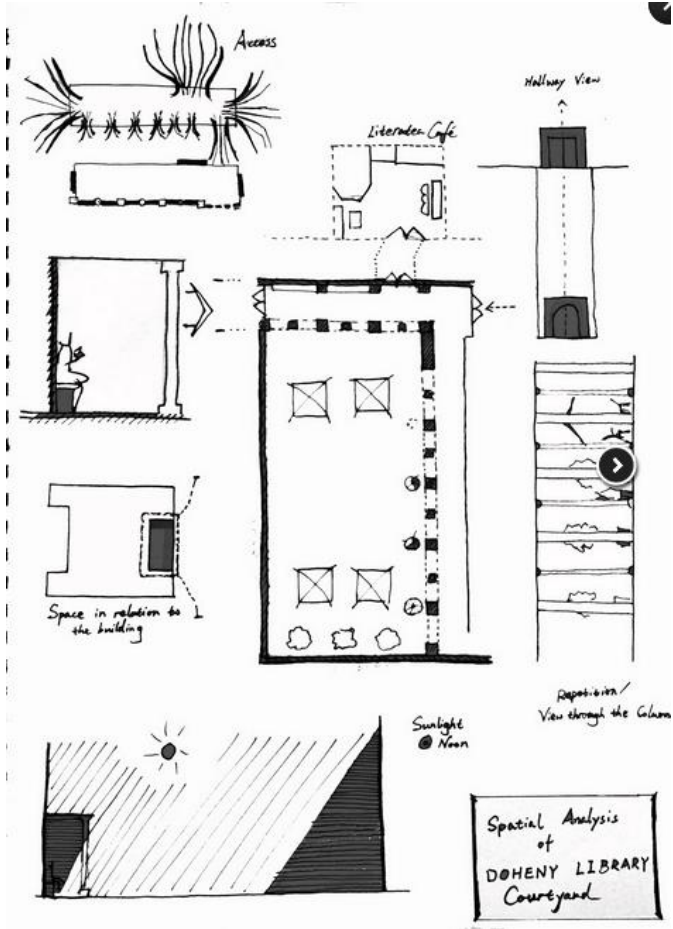


SSCI 301: MAPS AND SPATIAL REASONING



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ARCH 303: PRINCIPLES OF SPATIAL DESIGN I



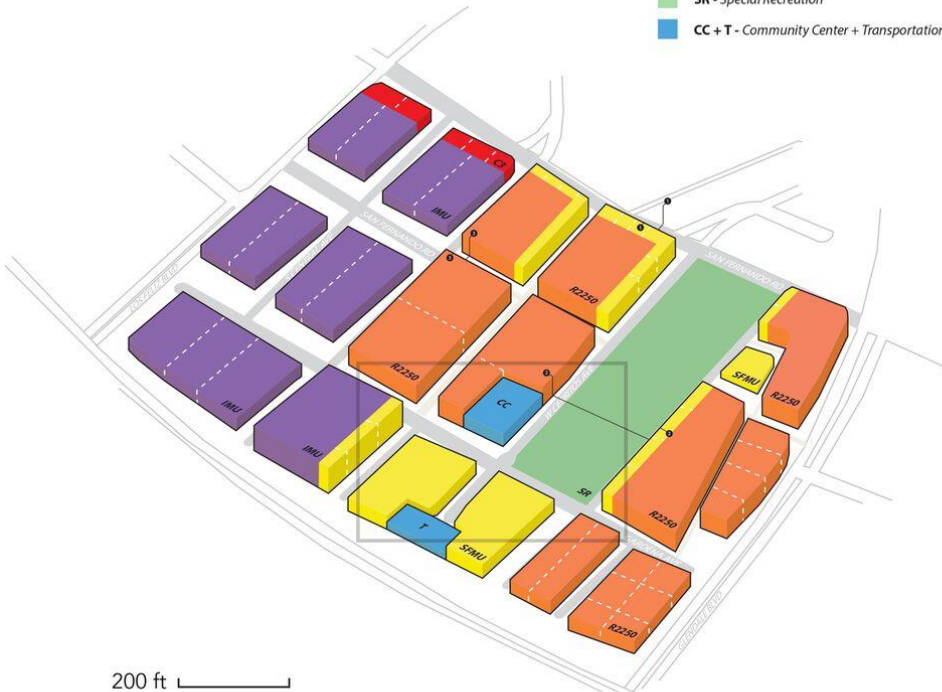
Ziyu Ouyang / Understanding Place through Experience and Analysis / 2015



ARCH 403: PRINCIPLES OF SPATIAL DESIGN II

LEGEND

- R2250 - Medium Density Residential
- SMFU - Commercial/Residential Mixed Use
- IMU - Industrial/Commercial Mixed Use
- C3 - Commercial Service
- SR - Special Recreation
- CC + T - Community Center + Transportation



Axonometric Map





SSCI 412: GEODESIGN PRACTICUM



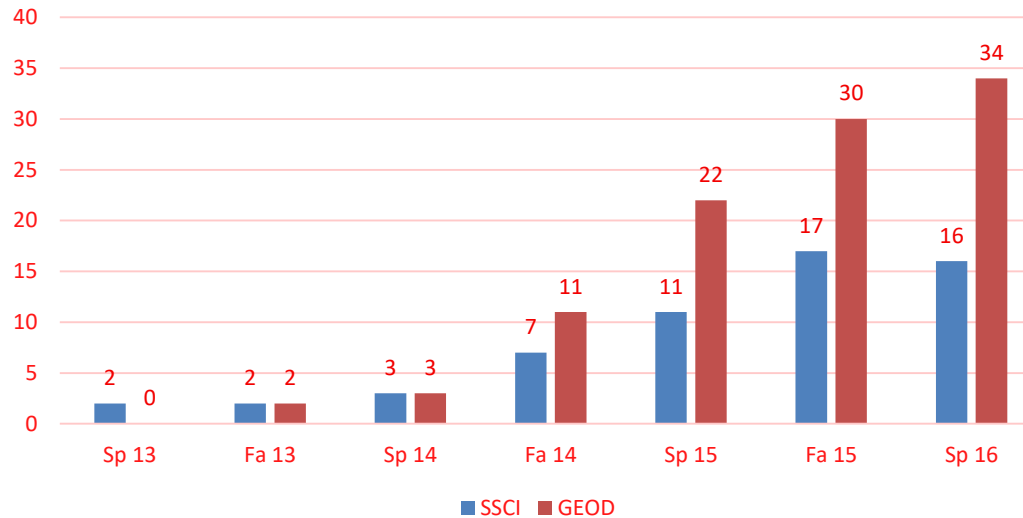
Developing plan and project ideas for recovery of endangered Palos Verdes blue butterfly for an external client, the Disney Conservation Fund





Student Response

SSI Majors and Minors

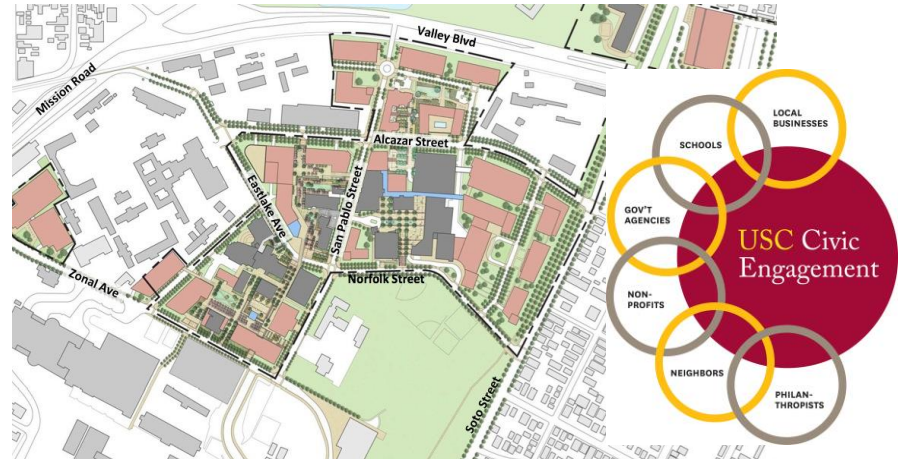


- First major for 9 students
- 25 students changed majors
 - ANTH, ARCH, ASTE, BISC, CHEM, ENGL, ENGR, HBIO, MUSC, PHYS, PLUS, SOCI
- Scholarships & Honors
 - 2 Trustee, 3 Presidential, & 2 Dean's Scholars
 - 14 students made Dean's List in Fall 2015



Enduring Challenges

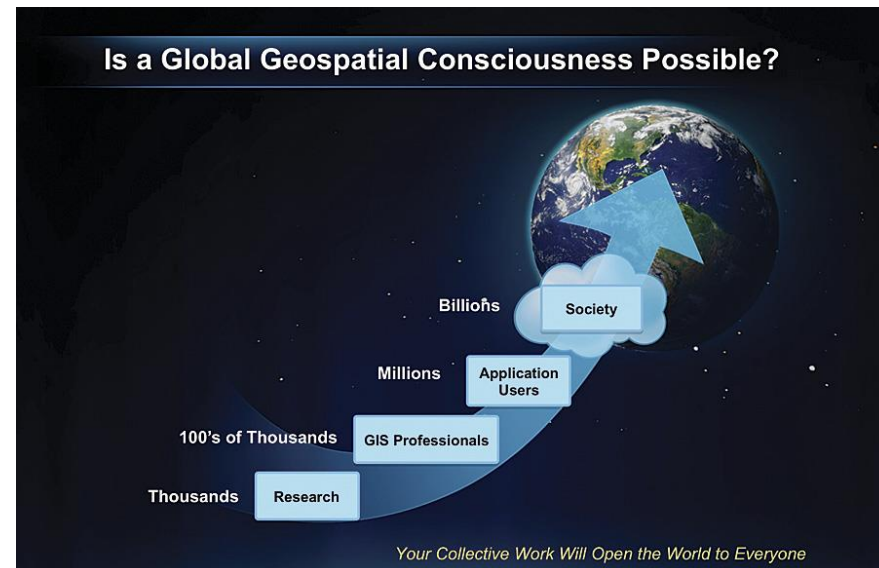
- Planning and coordination
 - Class scheduling
 - Faculty coordination
 - **Team teaching**
 - Progressive degrees
- Facilities
 - New collaborative classroom
 - Large and diverse computing infrastructure
- Geodesign as a collaborative, socio-political process
 - Teach across several disciplines & spatiotemporal scales
 - Teach & support new workflows
 - Promote community engagement





Geodesign ...

- Has the capacity to shift GIS to a whole new approach, one oriented toward collaboration, creation, imagination, experimentation, and with a view towards applying knowledge in a forward looking manner
- The GIS, itself, would then fade into background ...





Close || Questions

SSCI 350: International Geodesign



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CLOSE | 14

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