**PETITION TO SUBSTITUTE MASTER OF ARCHITECTURE BASIC STUDIES COURSE REQUIREMENT**

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<tr>
<th>Name</th>
<th>USC ID#</th>
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**EQUIVALENT COURSE TITLE(S):**

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**COURSE #:**

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**UNITS:**

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**SEMESTER/YEAR COURSE WAS COMPLETED:**

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**GRADE:**

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**INSTITUTION:**

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**Number & Title of Course:** **ARCH 213A  BUILDING STRUCTURES AND SEISMIC DESIGN  3 UNITS**

**Course Description:**

a: Investigation and design of elements and systems for building structures; applied mechanics, strength of materials, structural investigation as a design tool.
b: Investigation and design of structure systems: their resistance to seismic and wind forces and integration.

**Course Goals & Objectives:**

1. To develop informed intuition for structures.
2. To introduce underlying concepts, formulas, and theory of structures.
3. To introduce the 4 Ss of structure: Strength, Stiffness, Stability, Synergy.
4. To facilitate effective communication with structural engineers.
5. To introduce loads acting on buildings: gravity, wind, seismic, thermal.
6. To introduce graphic methods to visualize the effect of loads.
7. To introduce stress types: tension, compression, bending, shear, torsion.

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<tr>
<th>Required Curricular Topics addressed</th>
<th>Met</th>
<th>Not Met</th>
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<tbody>
<tr>
<td>Statics</td>
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<tr>
<td>Strength of Materials, Stress</td>
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<td>Beam Design</td>
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<td>Column Design</td>
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<th>Required Student Performance Criterion/a addressed:</th>
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<th>Not Met</th>
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<tr>
<td>B.9 Structural Systems</td>
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**Topical Outline:** (include percentage of time in course spent in each subject area):

- Structure design (40%)
- Structure analysis (60%)

**Textbooks/Learning Resources:**


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**FOR OFFICE USE ONLY**

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<th>Recommendation</th>
<th>☐ Substitution Approved</th>
<th>☐ Substitution Denied</th>
<th>Date</th>
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**Associate Director, Master of Architecture**

Selwyn Ting

**Comment**

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