**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Canada |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
|  | |
| **Use of Sustainable strategies** | |
| Highly efficient energy recovering system. | |
| **Use of Technology** | |
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| **Use of materials** |
|  |
| **Photovoltaic strategy** |
| Operates on 93% optimal efficiency |
| **What strategy would you copy? What is the greatest strength?** |
| Based on the result of this project, I guess the hot water system must be very good. |
| **What is the greatest weakness of the entry? What would you avoid?** |
| This building scored low on energy balance, so I’m going to assume its PV system wasn’t well design. |
| **Additional comments?** |
| What does the tepee has to do with anything? |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | China-Y |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
| Green around the house | |
| **Use of Sustainable strategies** | |
| Recycling shipping container | |
| **Use of Technology** | |
| Split System Air conditioning | |

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| **Use of materials** |
| Shipping Container |
| **Photovoltaic strategy** |
| PV panels |
| **What strategy would you copy? What is the greatest strength?** |
|  |
| **What is the greatest weakness of the entry? What would you avoid?** |
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| **Additional comments?** |
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**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Florida-Flex House |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** | |
|  | |
| **Use of Sustainable strategies** | |
| Natural Lighting on the north and south face of the building | |
| **Use of Technology** | |
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| **Use of materials** |
| Durable Energy efficient  Easy to maintain None-Toxic  Recyclable  Recycled |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
| The overall look and feel of the spaces |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Since this house comes in last, there must be a lot of weaknesses |
| **Additional comments?** |
| Maybe we can integrate some of the other team’s technology to improve its result. |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Hawaii-Hale Pilihonua |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
| Solar panels | |
| **Use of Sustainable strategies** | |
| Cross ventilation | |
| **Use of Technology** | |
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| **Use of materials** |
| bio-based, fiber-reinforced polymer-strong and lightweight, resist corrosion,rot,termites |
| **Photovoltaic strategy** |
| Water cooled PV |
| **What strategy would you copy? What is the greatest strength?** |
| Solar thermal collectors for hot water |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Solar panels on the side of the house which blocks the views |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Illinois-Rehome |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
| Canopy for shading  Solar Panels | |
| **Use of Sustainable strategies** | |
| Grey water recycle | |
| **Use of Technology** | |
| iPad app | |

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| **Use of materials** |
| Spray foam insulation  Wood  Recycle steel |
| **Photovoltaic strategy** |
| 24 high efficiency PV panels |
| **What strategy would you copy? What is the greatest strength?** |
| Pre-fabrication house  Lay out of the rooms |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
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**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Maryland-Watershed House |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** | |
| Solar Thermal Wall- heat up water using the sun  Liquid Desiccant Wall- reduce humidity | |
| **Use of Sustainable strategies** | |
| Natural Ventilation (cross breeze)  Clerestories lighting  Green Roof  Gray water filtering system | |
| **Use of Technology** | |
|  | |

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| **Use of materials** |
| Wood  Plants |
| **Photovoltaic strategy** |
| Micro-inverters DC=>AC |
| **What strategy would you copy? What is the greatest strength?** |
| The solar thermal wall  Grey Water being reused |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
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**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | New York-Solar Roofpod |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
| Glazed Window | |
| **Use of Sustainable strategies** | |
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| **Use of Technology** | |
| Oxnilux “Bird-safe glass” | |

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| **Use of materials** |
| Wood cladding  Spray foam insulation |
| **Photovoltaic strategy** |
| 10.08kW  Anti-reflective solar panels  Power the building below due to extra energy |
| **What strategy would you copy? What is the greatest strength?** |
| The anti-reflective coating  Connecting it to another home to provide them extra energy |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Not ADA friendly |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | New Zealand-First Light |
| **Preference:** | No |
|  | |
| **Use of Passive Solar Strategies** | |
| Canopy for shading | |
| **Use of Sustainable strategies** | |
| Highly efficient energy recovering system. | |
| **Use of Technology** | |
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| **Use of materials** |
| Renewable resource such as wool. Used up to 10” for insulation  Wood some of the Laminated Veneer Lumber (LVL)  Concrete slab |
| **Photovoltaic strategy** |
| 28 polycrystalline photovoltaic panels  Panels consist of silicon wafers  Convert solar radiations into direct current |
| **What strategy would you copy? What is the greatest strength?** |
| The use of materials such as wool for insulations |
| **What is the greatest weakness of the entry? What would you avoid?** |
| By examining the floor plan, I see a kitchen and behind it is a double door.  I feel like the greatest weakness of this house is the layout of spaces. |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Parsons New School for Design |
| **Preference:** | No |
|  | |
| **Use of Passive Solar Strategies** | |
| Solar Panel | |
| **Use of Sustainable strategies** | |
| Wrapped the livable space in a thick insulated envelope | |
| **Use of Technology** | |
| Hydropack? | |

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| **Use of materials** |
|  |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
|  |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
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**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | SCI-CHIP |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** | |
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| **Use of Sustainable strategies** | |
|  | |
| **Use of Technology** | |
| Connect to internet for weather updates  Use of Xbox Kinect and iPad to monitor the home  Automated shades | |

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| **Use of materials** |
|  |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
| Use waste heat from AC to heat up water |
| **What is the greatest weakness of the entry? What would you avoid?** |
| The look of the exterior  Bed not ADA friendly |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | Virginia-Tidewater |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** | |
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| **Use of Sustainable strategies** | |
|  | |
| **Use of Technology** | |
| Sensors at windows and door, to turn on/off HVAC system | |

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| **Use of materials** |
| Rain screen |
| **Photovoltaic strategy** |
| PV panels |
| **What strategy would you copy? What is the greatest strength?** |
| Sunspace/porch  Secret bedroom |
| **What is the greatest weakness of the entry? What would you avoid?** |
| The mix style of modern and 19th century England |
| **Additional comments?** |
|  |