

THREE RIVERS COMMUNITY COLLEGE  
**SUSTAINABLE DESIGN ARC K214**  
 Spring 2010, Tuesday/Thursday 4pm - 5:30pm

Instructor: Professor Mark Comeau, AIA, (885-2387.), email [MComeau@trcc.comnet.edu](mailto:MComeau@trcc.comnet.edu)

Grade: Quizzes (4) 50%                      Mid term 15%                      Essay 20%                      Final 15%

**Course Objectives:**

Students will gain working knowledge of sustainability in design, healthy design, renewable energy, co-generation, recycling, low VOC, zero carbon, and LEED as they relate to regional and urban planning, building design, building envelope, building interior environment, site ecology, energy resources, and infrastructure and transportation.

Method: Lectures, Slide Lectures, Simulations, Class Discussion

**Text: Instructor Supplements**

*(Note: Documentation appropriate to the scheduled lecture will be distributed at the time of each lesson.)*

Introduction  
(1/21)

**Over-view**  
Course Objectives & Outcomes

Week 1  
(1/26)

**Historical Perspectives**  
Cultures, Context & Resources

Week 9  
(3/23)

**Legal & Regulatory Aspects**  
EPA, DEP and Codes

Week 2  
(2/02)

**Planning: Macro**  
Regional Patterns

Week 10  
(3/30)

**Sustainable Preservation**  
Adaptive Reuse & Recycling

Week 3  
(2/09)

**Planning: Micro**  
Community Patterns

Week 11  
(4/06)

**Sustainable Integrations**  
New Way-meets-Old Way

Week 4  
(2/16)

**Site Planning & Design**  
Orientation & Landscape

Week 12  
(4/13)

**Sustainable Lifestyle**  
Adopting Best Practices

Week 5  
(2/23)

**Resources: Natural**  
Water Depletion, Pollution, Conservation

Week 13  
(4/20)

**Sustainable Buildings**  
Design & Operations

Week 6  
(3/02)

**Resources: Energy**  
Renewable & Co-generation

Week 14  
(4/27)

**Sustainable Detailing**  
Building Info Modeling (BIM)

Week 7  
(3/09)

**Spring Break**  
No Class in Session

Week 15  
(5/04)

**Case Study**  
To Be Announced

Week 8  
(3/16)

**Economics of Sustainable Design**  
Cost Benefits & Life-cycle

Week 16  
(5/11)

**Conclusion**  
Exam, Final Projects Due

Notebook

Students will assemble a notebook, to be made up of handouts distributed at the beginning of each class. A 3" "Slant-ring" notebook with plastic sheet protectors is recommended – this will be a good resource for future reference.

Case Study

TBA - more details will be discussed in class.