Annexure B – Reading list
Module 7: Climate Change and Shelter and Housing

Shortlist of reading for the course

Design homes in cold climates:

- Wolfe, S. and D. Stangel (2013). *How to Future Proof Your Home: A Guide to Building with Energy Intelligence in Cold Climates,* available from www.futureproofmybuilding.com

For a clear text on how people adapt themselves and their environment and buildings to achieve comfort and the characteristics of over-heating or over-cooling of buildings see:

- Nicol, F., M. Humphreys and S. Roaf (2012). *Adaptive Thermal Comfort: Principals and Practice,* Earthscan. London.

For a practical guide to the building blocks of house design and tools for both adapting and mitigating climate change, including introductions to renewable energy technologies, see:

- Roaf, S., M.Fuentes and S. Thomas (2012). *Ecohouse: A Design Guide*, 4th Edition, Architectural Press, Oxford.

For an important philosophy on building resilient communities from the bottom up:

- Hopkins, Rob (2011). The Transition Companion: Making Your Community More Resilient in Uncertain Times, Transition Books, Totness.

Design guidance for hot climates:

- Konya, A. and M. Vandenberg (2011). Design Primer for Hot Climates, Archimedia Press Limited, Reading.

Design advice for flood-proofing settlements:

- Watson, D., and M. Adams (2010). Design for Flooding: Architecture, Landscape, and Urban Design for Resilience to Climate Change, John Wiley and Son.
- *Design guidance on developing resilient cities:*
- Newman, P., T. Beatley and H. Boyer (2008). Resilient Cities: Responding to Peak Oil and Climate Change, Island Press Washington.
- *For a good overview of the drivers and barriers to adapting to climate change:*
- Roaf, S., D. Crichton and F. Nicol (2009). *Adapting Buildings and Cities for Climate Change*, Architectural Press. 2nd Edition. In Press.

A good book that shows how cities and their residents can be planned according to nature's organizing principles to increase their resilience against nature's destructive tendencies see:

- Newman, P. and I. Jennings (2008). *Cities as Sustainable Ecosystems: Principles and Practices,* Island Press, Washington.

A classic text on the issues, metrics, indicators and benchmarks for measuring progress towards sustainable and climate responsive buildings:

- Roaf, S., A.Horsley and R.Gupta (2004). *Closing the Loop: Benchmarks for Sustainable Buildings*, RIBA Publications, London.

Additional Literature

Baker, N.V. (Ed.) 1987. Passive and low energy building design for tropical climates. Commonwealth Science Council. University of Cambridge, Cambridge, UK.

Bay, Joo-Hwa and Boon-Lay Ong, 2006. Tropical Sustainable Architecture. Elsevier, Architectural Press. Oxford, UK

Bicknell, Jane ; David Dodman, David Satterthwaite, 2009. Adapting Cities to Climate Change: Understanding and Addressing the Development Challenges. Earthscan. London.

Colton Norman, 1978. Solar heated houses : solar heating and cooling, solar water systems, site planning, different climate designs. Tutor Press, Toronto.

Detail Green Books, 2012. Net Zero Energy Building, Birkhauser Architecture, Switzerland.

Development Workshop France (no date) , MANUAL FOR CYCLONE RESISTANT CONSTRUCTION. Adapted for post Cyclone Nargis safe recostrucion of schools, houses and other public buildings. Version produced for the DWF/Save the Children Alliance safe construction programme, Yangon, Myanmar. Contact: www.dwf.org, dwf@dwf.org

Development Workshop. (no date) Community Based Disaster Risk Management. Good Practice Examples. UNDP/Red Cross Netherlands.

Foletta, Nicole, and Simon Field (2011): Europe's Vibrant New Low Car(bon) Communities, Institute for Transportation and Development Policy

Golden, J. 2004. The Built Environment Induced Urban Heat Island Effect in Rapidly Urbanizing Arid Regions: A Sustainable Urban Engineering Complexity. *Environmental Sciences. (http://schoolofsustainability.asu.edu/docs/smartwebarticles/100001_two.pdf*)

Guzowski, Mary. Towards Zero Energy Architecture. New Solar Design. Laurence King Publishing. London, UK.

Hegger, Manfred (Ed.) 2008. Sunny times. Solar Decathlon House Team Germany 2007. Muller+Busemann, Wuppertal, Germany.

Hegger, Manfred (Ed.) 2010. Sunny prospects. Solar Decathlon House Team Germany 2009. Muller+Busemann, Wuppertal, Germany.

Hellevang, Kenneth ; Carl Pedersen (2009). AE-1393 Healthier Homes Using Air to Air Heat Exchangers. North Dakota State University.

http://www.ag.ndsu.edu/pubs/ageng/structu/ae1393.pdf

Hindrichs, D; D. K. Daniels (Eds.) 2007. plusminus20°/40°latitude. Sustainable building design in tropical and subtropical regions. Edition Axel Menges, Stuttgart/London.

Larson, J. (2006). *Setting the record straight: more than 52,000 Europeans died from heat in summer 2003,* published by the Earth Policy Institute, Washington, available at: www.earth-policy.org /updates/2006/Update56.htm).

Lauber, W, 2005. Tropical Architecture. Sustainable and Humane Building in Africa, Latin America and South-East Asia. Presetel. Munich.

Lebens, Ralph M. (Ed.) 1980. Passive Solar Architecture in Europe: The Results of the First European Passive Solar Competition, Architectural Press, London.

Nakicenovic, K. ; N. and R. Swart (2010). Special Report on Emission Scenarios, Cambridge University Press, Cambridge, UK.

Nicol. F., M. Humphreys and S. Roaf (2012). Adaptive Thermal Comfort: Principals and Practice, Earthscan, London.

Norton, John and Guillaume Chantry (no date) . More to lose. The case for prevention, loans for strengthening, and 'safe housing' insurance – the case of central Vietnam. In Lee Bosher. Hazards and the Built Environment.

Olgyay, Victor, 1963. Design with Climate, bioclimatic approach to architectural regionalism, Princeton University Press, Princeton, New Jersey.

Petruccioli, Antonio, 1988, Fathepur Sikri. Carucci Publishers, Rome.

Prasad, Neeraj; Ranghieri, Federica; Shah, Fatima; Trohanis, Zoe; Kessler, Earl; Sinha, Ravi. (2009): Climate Resilient Cities: A Primer on Reducing Vulnerabilities to Disasters. Washington, DC: World Bank.

Roaf, S., D. Crichton and F. Nicol (2009). Adapting Buildings and Cities for Climate Change, Architectural Press, Oxford. Download for free: http://www.ebook3000.com/Adapting-Buildings-and-Cities-for-Climate-Change_90454.html

Roaf, S., M. Fuentes and S. Thomas (2012). Ecohouse: A design Guide. Taylor and Francis, London.

Rosenzweig, Cynthia et al. (2011). Climate Change and Cities. Cambridge University Press, Cambrigde.

Roth, Manuela (Ed.) 2009. Ecological Living. teNeues, Kempen, Germany.

Serrats, Marta (Ed.), 2010. 150 Best Eco House Ideas. Collins Design. New York.

Wen Hong, Madelaine Steller Chiang, Ruth Shapiro, Mark Clifford, 2007. Building Energy Efficiency, Why Green Buildings Are Key to Asia's Future. An Asia Business Council Book. Hong Kong.

Wittkopf, Stephen K and Tan Beng Kiang (Ed.) 2007. Sun, Wind and Architecture, Passive and Low Energy Architecture. National University of Singapore, Singapore.

World Bank, 2012. Turn Down the Heath: Why a 4°C Warmer World Must be Avoided, A Report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics

Web Resources

On Flood Awarenesness:

http://www.selinsgrove.org/Pages/Flood%20Awareness.aspx

On Green Infrastructure:

http://water.epa.gov/infrastructure/greeninfrastructure/

http://water.epa.gov/infrastructure/

http://water.epa.gov/infrastructure/greeninfrastructure/

On Rainwater Harvesting:

http://www.tucsonbotanical.org/gardening/rainwater-harvesting/

UK Climate Impacts Programme Resource Data Base:

http://www.ukcip.org.uk/resources/

On Solar Houses:

http://www.greenspec.co.uk/designing-for-passive-solar.php

Further Reading on Passivhaus:

Passivhaus: a brief introduction:

http://www.greenspec.co.uk/passivhaus-introduction.php

Solar Collector types: Energy Efficiency and Renewable Energy Solar Energy Technologies Program:

http://www.yoursolarpowerhome.com/Solar_Water_Heating.pdf

Solar Collectors: Different Types and Fields of Application:

http://www.solarserver.com/knowledge/basic-knowledge/solar-collectors.html

http://energy.gov/energysaver/articles/solar-water-heaters

http://www.greenspec.co.uk/solar-collectors.php