

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

This course outline template acts as a guide for writing your course outline. As every course is different, please feel free to amend the template/ format to suit your requirements.

COURSE OUTLINE TEMPLATE

Course Title	GREEN BUILDING		
Course Code	AR704	No. of Credits	2
Department	ARCHITECTURE	Faculty	PROF. G. SANGEETHA
Pre-requisites Course Code	NIL		
Course Coordinator(s) (if, applicable)	PROF. G. SANGEETHA		
Other Course Teacher(s)/Tutor(s) E-mail	NIL	Telephone No.	2503565
Course Type	<input type="checkbox"/> Core course <input type="checkbox"/> Elective course		

COURSE OVERVIEW

An insight into concepts of green building: Knowledge on increasing the efficiency of resource usage while reducing the impacts of building on human health and the environment. Understanding the energy efficient materials and the contextual aspects of the site that help to achieve a sustainable building design.

COURSE OBJECTIVES

Introduction to green architecture and basic principles of green building design which will include concepts concerning green building technologies, green materials and equipments, efficient use of resources, economic and environment impact assessment of buildings.

COURSE OUTCOMES (CO)

Course Outcomes	Aligned Programme Outcomes (PO)
<ol style="list-style-type: none"> 1. Understanding of Green Building Design Technologies 2. Understanding of Efficient usage of resources 3. Understanding of energy efficient materials and equipments. 4. Understanding of economic and environmental impact of buildings. 	

COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week	Topic	Mode of Delivery
1	Week 1 January	Introduction to the course. Insight into green buildings Introduction of Assignment 1 -Case study of Rated Green Buildings	Lectures
2	Week 2 January	Green Buildings and its need	Lectures
3	Week 3 January	Green Building technologies and its impact on environment	Site Visits/ Guest Lecture
4	Week 4 February	Design of buildings to use renewable energy.	Lectures
5	Week 5 February	Assignment 1 - Case Study Presentation	Lectures/Seminar
6	Week 6 February	Optimization of materials use, design of water-efficient, landscaping	Lectures
7	Week 7 February	Recycling waste, use of "gray water". Siting & Land Use	Lectures
8	Week 8 March	Materials choosing low - maintenance, low embodied energy recyclable building materials. Assignment 2 Introduction – Term paper	Guest Lecture
9	Week 9 March	Equipment – high - efficiency heating or cooling equipment, lights and appliances and installing water efficient equipment. CA Test	Lectures
10	Week 10 March	Job Site & Business - protecting trees and topsoil during site work, minimizing job - site waste, making business operations more environmentally responsible.	Lectures

11	Week 11 March	Materials choosing low - maintenance, low embodied energy recyclable building materials.	Guest Lecture
12	Week 12 March	Life cycle costing of the building and components including the economic & environmental impact and performance.	Guest Lecture
13	Week 13 April	Term paper Presentation	Seminar
14	Week 14 April	Life cycle costing of the building and components including the economic & environmental impact and performance.	Guest Lecture
15	Week 15 April	Final Exam	

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	CA Test	9 th week	60 minutes	20%
2.	Assignment 1- Case study	1 st week	4 weeks	20%
3.	Assignment 2 -Term Paper	8 th week	4 weeks	10%
4.	Semester Examination	15 th week	180 minutes	50%

ESSENTIAL READINGS :

1. Wines James & Jodido Philip, "Green Architecture – The Art of Architecture in the age of Ecology", Taschen Publishers, New York, 2000.
2. Mackenzie Dorothy, "Green design: design for the Environment", Laurence King, London, 1997.
3. Farmer John & Richardson Kenneth, "Green Shift: Changing attitudes in architecture to the Natural World", Architectural Press, Boston, 1999.
4. The European Commission, "A Green Vitruvius: Principles and Practices of Sustainable Architectural Design", James & James, London, 1999.
5. Fred A. Stitt, "The Ecological Design Handbook", McGraw Hill, New York, 1999. 6. Scott Andrew, "Dimensions of Sustainability: Architecture, Form, Technology, Environment & Culture", F&FN Spon, London, 1998.

COURSE EXIT SURVEY (mention the ways in which the feedback about the course is assessed and indicate the attainment also)

1. Feedback form may be given to students to be filled in and collected back.

COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)

1. **Class will be of** lectures, guest lectures, site visits, lives case studies, seminars and discussions.
2. **Attendance:** A minimum of 75 % attendance percentage is required to be able to attend the end semester examination.
3. **Pass Marks:** A minimum of 40% of marks is required to pass the subject.
4. **Retest:** On a genuine case, if a student is absent for the continuous assessment test, he/she will be permitted to give a retest by providing the supporting documents of evidence for absence and it will be held in the second week of April before the final examination and the portion for which will be the portions taught till date of the Retest.
5. **Case study** will be of group work. Students are responsible to conduct the case study and every other aspects related to the case study.
6. **Meeting the faculty:** Any student can meet the course faculty in case of any query or difficulty faced pertaining to the subject, during the office hours with a prior appointment fixed.

ADDITIONAL COURSE INFORMATION

NIL

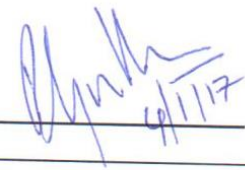
FOR SENATE'S CONSIDERATION

NIL

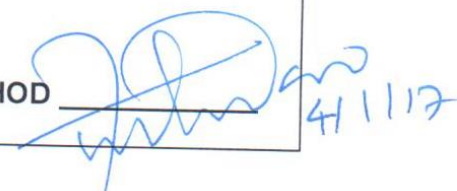
Course Faculty


4/11/17

CC-Chairperson


4/11/17

HOD


4/11/17