COURSE TITLE BLACKBOARD SITE	ARC 5814 Advanced Design Studio 01 Fall 2012 – http://my.ltu.edu and select CRN OL 1728
INSTRUCTOR	John Abela Adjunct Faculty jabela@ltu.edu 248-224-4969 Office hours by appointment
SCHEDULE	August 29 – December 21, 2012 Refer to http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp for the last date to withdraw and other important registration related information.
LEVEL/HOURS PREREQUISITE	Graduate / 04 credit hours
REQUIRED TEXT (See Blackboard for additional resources)	There is no required text for this course. Reading / discussion topics will be distributed by the instructor.
ADDITIONAL RESOURCES	LTU Online student resources: http://www.ltu.edu/ltuonline/
TECHNICAL SUPPORT	Technical support for using Blackboard is provided by the Helpdesk, 248.204.2330 or helpdesk@ltu.edu. Send the Help Desk a form detailing any issues by clicking here http://tinyurl.com/3yqrvne.

COURSE SCHEDULE

This fully online course begins with a partial week online course orientation period to familiarize yourself with the online learning environment and to meet online or via the phone with your instructor. Each subsequent week starts on a Monday and ends on a Sunday.

Dates	Modules	Topics / Readings	Assignments Due
Prior to Semester Start and Aug 29 – Sep 2	Module 0	Exercise 1: SKeTCH PRoBLeM 1	Course orientation
Week of Sep 3 – Sep 9	Module 1	Review 1st assignment Class discussion	SKeTCH PRoBLeM 1 Due
Week of Sep 10 – Sep 16	Module 2	Context Introduce Site for SKeTCH PRoBLeM 2	.
Week of Sep 17 – Sep 23	Module 3	Class discussion Introduce Brief for SKeTCH PRoBLeM 2	.
Week of Sep 24 – Sep 30	Module 4	Review 2nd assignment Class discussion Introduce DeSiGN PRoBLeM	SKeTCH PRoBLeM 2 Due
Week of Oct 1 – Oct 7	Module 5	.	.
Week of Oct 8 – Oct 14	Module 6	.	.
Week of Oct 15 – Oct 21	Module 7	.	.
Week of Oct 22 – Oct 28	Module 8	.	.
Week of Oct 29 – Nov 4	Module 9	.	.
Week of Nov 5 – Nov 11	Module 10	.	MiD-TeRM ReVieW (date and format to be determined
Week of Nov 12 – Nov 18	Module 11	.	.

Dates	Modules	Topics / Readings	Assignments Due
Week of Nov 19 – Nov 25	Module 12	**Thanksgiving Break**	.
Week of Nov 26 – Dec 2	Module 13	.	.
Week of Dec 3 – Dec 9	Module 14	.	.
Week of Dec 10 – Dec 16	Module 15	.	FiNaL ReVieW (format and date(s) to be determined)
Week of Dec 17 – Dec 21	Final Exams	Course Summary End of Course	.

STUDENT EVALUATION

The course has 3 assignments totaling 90 points. Credit is also given for the final presentation and online participation. Letter grades are awarded based on the total number of points achieved. **NO LATE ASSIGNMENTS WILL BE ACCEPTED OR GRADED.**

Assignments	Points
01	10
02	20
03	60
Final Presentation	10
Participation	10
Total Points	110

Class Points	Letter Grade
105 and above	A
99 – 104	A-
95 - 98	B+
91 – 94	B
88 – 90	B-
85 – 87	C+
81 – 84	C
77 – 80	C-
76 and below	E

Note: Grades lower than a "B" fall below the LTU graduate standard

EDUCATIONAL GOALS / STUDENT LEARNING OBJECTIVES / OUTCOMES

Foster professional growth and the awareness that good design is not only an aesthetic concept, but a practical holistic methodology centered around humanism, urbanism, and environmentalism.

To understand that successful design encompasses a breadth of disciplines and connects people on a variety social/political/environmental/and economic levels. To develop a comprehensive resolution to the design issues under study and to demonstrate proficiency in both graphic and oral presentations skills within the framework of the assignments.

Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:
_ Being broadly educated.
_ Valuing lifelong inquisitiveness.
_ Communicating graphically in a range of media.
_ Recognizing the assessment of evidence.
_ Comprehending people, place, and context.
_ Recognizing the disparate needs of client, community, and society.

Communication Skills: *Ability to* read, write, speak and listen effectively.

Design Thinking Skills: *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

Visual Communication Skills: *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

Technical Documentation: *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

Investigative Skills: *Ability to* gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

Fundamental Design Skills: *Ability to* effectively use basic architectural and environmental principles in design.

Use of Precedents: *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

Ordering Systems Skills: *Understanding* of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

Historical Traditions and Global Culture: *Understanding* of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

Cultural Diversity*: Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and the impact of such decisions on the environment. Students learning aspirations include:
_ Creating building designs with well-integrated systems.
_ Comprehending constructability.
_ Incorporating life safety systems.
_ Integrating accessibility.
_ Applying principles of sustainable design.

Pre-Design: *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

Comprehensive Design: *Ability* to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following:

Design Thinking Skills, Technical Documentation, Investigative Skills, Ordering Systems, Historical Traditions and Global Culture, Accessibility, Sustainability, Site Design, Life Safety, Environmental Systems, Structural Systems

Financial Considerations: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

Building Service Systems: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.

Building Materials and Assemblies: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:
_ Knowing societal and professional responsibilities.
_ Comprehending the business of building.
_ Collaborating and negotiating with clients and consultants in the design process.
_ Discerning the diverse roles of architects and those in related disciplines.
_ Integrating community service into the practice of architecture.

Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Human Behavior: *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.
Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and

recommending project delivery methods.

Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Community and Social Responsibility: *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors

PREREQUISITE SKILLS
Prerequisite courses, hand-drawing, sketching, electronic drawing programs, Adobe illustrator, In-Design, Photo-Shop, three-dimensional thinking, analytical skills, site analysis skills.

INSTRUCTIONAL METHODS AND COURSE ORGANIZATION
Weekly lectures / Live classroom sessions in which we discuss a variety of topics centered around Humanism, Urbanism, and Environmentalism. Weekly individual 'Desk-Crits' to discuss issues/topics specifically related to the particular student's project and outcome.

Blackboard Learning Environment – Blackboard at my.ltu.edu contains the syllabus, all assignments, reading materials, streaming videos, narrated PowerPoint mini-lectures, podcasts, written lecture notes, chapter quizzes, links to Web resources, and discussion forums. You will submit all assignments via Blackboard, and are expected to participate regularly in discussion topics. Please take time to familiarize yourself with the organization of the Blackboard site. You will want to check the site frequently for announcements reminding you of new resources and upcoming assignments.
Student/Instructor Conversations – Students keep in touch with the instructor via e-mail messages, telephone conference calls, and IM conversations.
Self-Assessments – Pre- and post- self-assessment tools will help students measure their entering skills and progress during the course.

CLASS POLICIES AND EXPECTATIONS
I plan to offer you a valuable learning experience, and expect us to work together to achieve this goal. Here are some general expectations regarding this course:

Each student has a LTU email account. If you wish to use a different email address for this course, please **change your email address in Blackboard under "Blackboard Tools", then "Personal Information"** and send an email to me to store your email address in my directory.

It is essential that all students actively contribute to the course objectives through their experiences and working knowledge.

All assignments must be submitted on schedule, via email.

Requirements for each assignment will be discussed in class.

NO LATE ASSIGNMENTS ARE ACCEPTED OR GRADED.

At midterm and at the end of the course, you will be invited to participate in a University evaluation of this course. Your feedback is important to the University, to LTU Online, and to me as an instructor, and I strongly encourage your participation in the evaluation process.

It is important for you as students to know what to expect from me as your instructor:
- I will be available to you via e-mail and phone, and will reply to your messages as soon as I am able.
- I will be available to you for face-to-face appointments at a mutually agreeable time.
- I will send out e-mail updates to all class members to guide upcoming work and remind you of assignment due dates.
- I will return all assignments to you promptly, and will include individualized comments and suggestions with each assignment.
- I will hold our personal written or verbal communications in confidence.
- I will treat all members of the class fairly, and will do my best to accommodate individual learning styles and special needs.
- If any of these points need clarification, or should special circumstances arise that require my assistance, please contact me so that we may discuss and resolve the matter.

PRACTICAL GUIDELINES FOR CLASS LOAD EXPECTATIONS

A four-credit design studio generally requires <u>at least</u> 20 hours per week of time commitment.

- A 15-week semester would require at least 300 hours of time commitment to successfully complete all the requirements for this studio.

These guidelines may not reflect the actual amount of outside time that you – as a unique individual with your own learning style – will need to complete the course requirements. The number of hours each week will vary based on assignment due dates, so please plan ahead to insure that you schedule your academic, work, and personal time effectively.

ASSIGNMENT DETAILS

Course assignments and evaluation criteria are detailed below. Please review these requirements carefully. See the section Academic Resources / Assessment Guidelines for information about assessment of written and oral presentations.

Details for all assignments are shown below. Please note that you <u>should not</u> submit any assignments to the Blackboard "Digital Drop Box."
All assignments will be delivered to the instructor either via email unless noted otherwise.

NO LATE ASSIGNMENTS ARE ACCEPTED OR GRADED.

SKeTCH PRoBLeM 1 (10 Points)

Overview – content will be discussed in class

SKeTCH PRoBLeM 2 (20 Points)

Overview – content will be discussed in class

DeSiGN PRoBLeM (60 Points)

Overview – content will be discussed in class

FiNaL PReSeNTaTioN (10 Points)

Overview – content will be discussed in class

Deliverables and Evaluation – Students will submit their work via email unless noted otherwise. Students projects will be evaluated on content per the guidelines to be discussed in class.

oNLiNe PaRTiCiPaTioN (10 points)

Each student is expected to actively participate in online activities. Class participation is evaluated to a maximum of 01 point per meeting.

SYLLABUS ADDENDA

Please see the LTU Online "Current Students" web site http://www.ltu.edu/ltuonline/ for comprehensive information about Lawrence Tech's academic services, library services, student services, and academic integrity standards. The content of this web site is explicitly included in these syllabus requirements.

The LTU Online "Current Students" web site also includes grading rubrics used by your instructor to evaluate written assignments, discussion forum participation, and group assignments. Please note that the SafeAssign anti-plagiarism product will be used for written assignments submitted for this course. Please see the instructions included on the eHelp web site regarding the use of the SafeAssign product.