

Course Change Requests

Course Change Requests

ARCH 643. Software Development for Building Design. (2-3). Credit 3

Prerequisite:

FROM:

ARCH 642 or equivalent

TO:

ARCH 633 or equivalent

Title:

FROM:

Software Development for Building Design

TO:

Software Analysis for HVAC Systems in Low Energy Buildings

Description:

FROM:

Microcomputer software development for applications in building design and analysis includes structures, acoustics, daylighting, economics, energy used and other design support systems; applications of microcomputer programming languages to data structuring, file management, algorithm development and simulation methods for building related problems.

TO:

Energy analysis (using Energy Plus software) with an emphasis on developing strategies for low energy use; simulation of various heating and cooling systems in low energy buildings; analysis of the mechanical equipment (including air handling systems, chiller and boilers), the building envelope, energy management control systems and indoor air quality.

EPSY 632. Research in Second Language Education.

Course Title Change:

FROM: EPSY 632

TO: BIED 632

Texas A&M University
Departmental Request for a Change in Course
Undergraduate ♦ Graduate ♦ Professional

• Submit original form and attachments •

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MAR 10 2011
GRADUATE STUDIES

Form Instructions

1. Request submitted by (Department or Program Name): ARCHITECTURE
2. Course prefix, number and complete title of course: ARCH 643 Software Development for Building Design
Attach a brief supporting statement for changes made to items 3a thru 3d, and 6 below.
3. Change requested
 - a. Prerequisite(s): From: ARCH 642 or equivalent To: ARCH 633 or equivalent
 - b. Withdrawal (reason): _____
 - c. Cross-list with: _____
Cross-listed courses require the signature of both department heads.
 - d. Change in course title and description. Enter complete current course title and current course description in item 5; enter proposed course title and proposed course description in item 6. Complete item 7 for change in title.
 - e. Change in course prefix, number, contact hours (lab & lecture), and semester credit hours. Complete item 7. **Attach a course syllabus.**
4. For informational purposes only, please indicate course number if this course will be stacked: _____
5. Complete current course title and current catalog course description: ARCH 643 - Software Development for Building Design. (2-3). Credit 3. Microcomputer software development for applications in building design and analysis includes structures, acoustics, daylighting, economics, energy used and other design support systems; applications of microcomputer programming languages to data structuring, file management, algorithm development and simulation methods for building related problems.

CORRECTED COPY

6. Complete proposed course title and proposed catalog course description (not to exceed 50 words): ARCH 643 - Software Analysis for HVAC Systems in Low Energy Buildings (2-3). Credit 3. Energy analysis (using Energy Plus software) with an emphasis on developing strategies for low energy use; simulation of various heating and cooling systems in low energy buildings; analysis of the mechanical equipment (including air handling systems, chiller and boilers), the building envelope, energy management control systems and indoor air quality.

7. a. As currently in course inventory:

Prefix			Course #			Title (excluding punctuation)																				
A	R	C	H	6	4	3	S	O	F	T	W	A	R	E	D	E	V	T	B	L	D	G	D	E	S	
Lect.	Lab	SCH		CIP and Fund Code										Admin. Unit			ECE Code			Level						
0	2	0	3	0	3	0	4	0	2	0	1	0	0	0	6	0	2	9	0	0	0	3	6	3	2	6

b. Change to:

Prefix			Course #			Title (excluding punctuation)																									
A	R	C	H	6	4	3	S	F	T	A	N	L	Y	H	V	A	C	S	Y	S	L	O	E	N	E						
Lect.	Lab	SCH		CIP and Fund Code										Admin. Unit			Acad. Year			ECE Code			Level								
0	2	0	3	0	3	0	4	0	2	0	1	0	0	0	6	0	2	9	0	1	0	-	1	1	0	0	3	6	3	2	6

Approval recommended by:

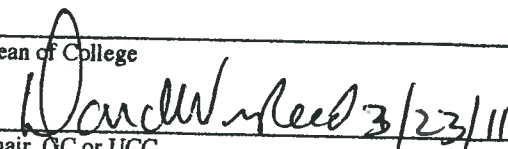
Ward Wells 
 Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Department Head or Program Chair (Type Name & Sign) Date
 (if cross-listed course)

Dean of College Date

Submitted to Coordinating Board by:

 3/23/11
 Chair, GC or UCC Date

Texas A&M University
Departmental Request for a Change in Course
Undergraduate ♦ Graduate ♦ Professional
 • Submit original form and attachments •

RECEIVED
 JAN 13 2011
GRADUATE STUDIES

Form Instructions

1. Request submitted by (Department or Program Name): ARCHITECTURE
2. Course prefix, number and complete title of course: ARCH 643 Software Development for Building Design
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 - b. Withdrawal (reason): _____
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4. For informational purposes only, please indicate course number if this course will be stacked: _____
5. Complete current course title and current catalog course description: ARCH 643 - Software Development for Building Design. (2-3). Credit 3. Microcomputer software development for applications in building design and analysis includes structures, acoustics, daylighting, economics, energy used and other design support systems; applications of microcomputer programming languages to data structuring, file management, algorithm development and simulation methods for building related problems.

6. Complete proposed course title and proposed catalog course description (not to exceed 50 words): ARCH 643 - Software Analysis for HVAC Systems in Low Energy Buildings (2-3). Credit 3. Energy analysis (using Energy Plus software) with an emphasis on developing strategies for low energy use; simulation of various heating and cooling systems in low energy buildings; analysis of the mechanical equipment (including air handling systems, chiller and boilers), the building envelope, energy management control systems and indoor air quality.

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Lect.	Lab	SCH		CIP and Fund Code						Admin. Unit			FICE Code			Level										
0	2	0	3	0	3	0	4	0	2	0	1	0	0	0	6	0	2	9	0	0	0	3	6	3	2	6

- b. Change to:

Prefix			Course #			Title (excluding punctuation)																									
A	R	C	H	6	4	3	S	F	T	A	N	L	Y	H	V	A	C	S	Y	S	L	O	E	N	E						
Lect.	Lab	SCH		CIP and Fund Code						Admin. Unit			Acad. Year			FICE Code			Level												
0	2	0	3	0	3	0	4	0	2	0	1	0	0	0	6	0	2	9	0	1	0	-	1	1	0	0	3	6	3	2	6

Approval recommended by:

Ward Wells *Ward Wells* 1/13/11 Date
 Department Head or Program Chair (Type Name & Sign) Date

Leslie Feigenbaum 1/13/11 Date
 Chair, College Review Committee Date

Leslie Feigenbaum 1/13/11 Date
 Department Head or Program Chair (Type Name & Sign) Date
 (if cross-listed course) Dean of College Date

Submitted to Coordinating Board by: _____ Chair, GC or UCC Date

ARCH 643 – Software Analysis for HVAC Systems in Low Energy Buildings
Professor Charles H. Culp, P.E., Ph.D., LEED-AP, FASHRAE

Class: Times To Be Determined

Office Hours: To Be Determined or by appointment.

E-mail or phone to make an appointment for other times.

I will make myself available during evenings and/or week-ends if needed.

Dr. Culp can be reached in the Architecture Department, Rm A-443.

Office Ph: 979-458-3600

Email: cculp@tamu.edu

Required Text: Textbook not required. Notes/Material Provided by Instructor

Goal: Introduce students to computational technologies and methods to achieve low energy use in residential and commercial building design by combining architectural design and technology.

Catalog Description: ARCH 643 - Software Analysis for HVAC Systems in Low Energy Buildings (2-3). Credit 3. Energy analysis (using Energy Plus software) with an emphasis on developing strategies for low energy use; simulation of various heating and cooling systems in low energy buildings; analysis of the mechanical equipment (including air handling systems, chiller and boilers), the building envelope, energy management control systems and indoor air quality.

Course Description: Students will develop an understanding of how to calculate and obtain low energy use in buildings while maintaining acceptable comfort and indoor environmental quality. The course will cover a commercial and a residential building with a focus on the performance of heating and cooling equipment, and air moving methods. The class will be divided into teams and each team will select a building type to analyze. Each team will complete a design of the building with a functioning high performance HVAC system. When appropriate, a site plan will also be completed. The building will be designed to minimize the energy use by applying low energy methods and technologies. Students will complete an analysis of the building performance and energy efficiency. Multidisciplinary teams may be formed consisting of Architecture and Engineering students. EnergyPlus from the US DOE will be taught and used for the analysis.

Prerequisite: Arch 633 or permission of instructor

Requirements: Access to a computer for completing drawings and running simulations is required. Free software (EnergyPlus) will be provided by the US Department of Energy. Sketch-Up and Revit 2010 (with MEP and Structures) will also be used in the class.

Objectives: Develop skills in working with multidisciplinary teams on integrating architectural design with engineering design. The project teams will learn to design an “optimal” low energy system using current state-of-the-art or state-of-the-future systems.

Homework: Homework and/or research assignments may be given weekly. These will be returned and discussed in class. Late homework will be marked down 10% per day late. Late homework will not be accepted after the answers are issued / discussed.

Tests / Quizzes: Tests may be given on specific subject matter covered in lectures.

Final: There will be a presentation developed in which the student designers (or design teams) will present and defend their designs. A final design document which includes the performance analysis is also required.

Project: Grading on the team project will be based on participation in the design team, level of energy reductions achieved, ability of the individuals to defend the designs

Attendance: Attendance is required. Class discussions will cover material on low energy use systems which has not yet been organized in a book. The final review for the design presentations will be scheduled at the end of the semester and may need to be in an evening. We may need to schedule other meetings / reviews as required. Absences will only be excused per student rule 7 (<http://student-rules.tamu.edu/rule07>).

Extra Credit: Attendance is needed since you will be working in teams. I give extra credit for class attendance. Five (5) consecutive days of attendance will earn 1 point (of up to 5). You can earn up to 5 extra points, which can make a difference of one letter grade.

Grading Policy:

Tests	10%
Homework / Reports	20%
Selected Presentations	10%
Final Written Project	40%
Final Presentation of Project	20%
<u>Extra Credit</u>	<u>5%</u>
Total	105%

Grade Earned:

90% – 105%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
<u>00% - 59%</u>	<u>F</u>

Helpful Hints for Doing Well in this Class

1. **Read assigned material before class.** Reading material will be assigned to assist you in building your energy use references.
2. **Turn in homework on-time.** Working the homework will bring out areas that you understand and that you may need help in.
3. **Attend the lectures.** Copies of the lecture notes and all material covered in class will be available on the class Web-CT site. Keep your notes in a large, well organized notebook. You will need to use it to study and during the exams. Try not to fall behind.
4. **Ask questions in class.** Make sure that you have copies of the solutions to the homework problems and that you understand how to solve them. The exams and final will primarily draw on the material used in these problems and the lecture notes.
5. **Drop-by during office hours and ask questions.** E-mail or phone to make an appointment and drop-by during other hours. I will make myself available during evenings and/or week-ends if needed. I will be using Web-CT e-mail to communicate to the class, so students in the class are required to check their Web-CT account daily.
6. **You are encouraged to work in groups to obtain a better understanding of the homework.** However, you are expected to turn-in your own homework that you have done. Your career performance on the tests will be based on what you know and therefore it is good idea to make sure you understand how to solve the homework problems by yourself.
7. **I use the Aggie Honor System for tests.** You will certify that you have completed the test by yourself. You are expected to perform all work on the tests by yourself.

COPYRIGHT NOTICE: The handouts in this class may contain material that has been photocopied with permission from the publisher and are therefore copyright. "Handouts" includes all material generated for this class, which includes, but is not limited to: syllabi, quizzes, exams, in-class notes and handouts, review sheets and assignments. Therefore, the copyright material in this class should not be copied without prior permission from the instructor.

NOTE ABOUT PLAGIARISM: Plagiarism consists of the passing off as one's own ideas, words, writings, etc., which belong to another. In accordance to this definition you are committing plagiarism if you copy the work of another person and turn it in as your own. If you have questions about plagiarism please consult the Texas A&M University Student Rules book, under the section "scholastic dishonesty".

AGGIE HONOR CODE: Please refer to the new University's Honor System web site ([//www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)). This code has detailed policies and procedures on how professors need to handle instances which violate the Aggie Honor Code. Please read and understand the information.

“An Aggie does not lie, cheat, steal or tolerate those who do.” Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the examinations, research papers and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

The following pledge applies to all course work, assignment and examinations at Texas A&M University. You may be required to sign this pledge on assignments. “On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work.”

NOTE FOR STUDENTS WITH DISABILITIES:

Americans with Disabilities Act (ADA) Policy Statement

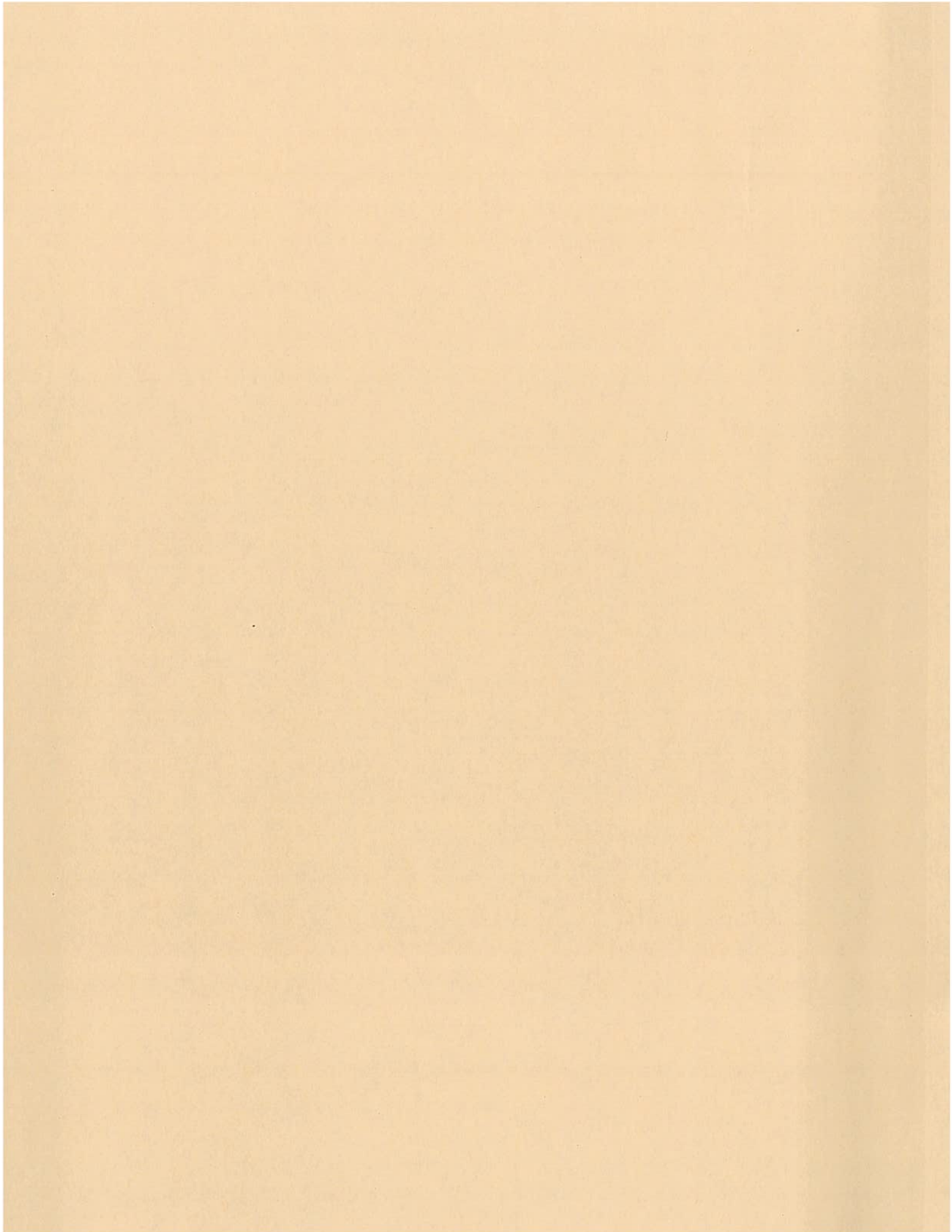
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

NOTE ABOUT ABSENCES: The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at <http://student-rules.tamu.edu/rule07>. Students are expected to attend class and to complete all assignments. Instructors are expected to give adequate notice of the dates on which major tests will be given and assignments will be due. The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. Students are advised to consult the University regulations for a list of authorized absences.

SEMESTER PLAN/LEARNING OBJECTIVES:

The following lecture plan reflects the current plan and may be adjusted to fit the specific needs of the university, faculty and students.

Week	Calend	Learning Objectives	Lecture	Homework
W1	1/19	1 General Intro to Course	Lecture 1-Introduction	Homework 1 - Basics, Install E+, Window5, SketchUp
		2 Set up E+/Other - Run Files	Review EnergyPlus	
		3 Standards 90.1, 62.1, IECC	Demo how to load on / access	
		4 SketchUp Plugin Installation	Show how to load and use SketchUp	
W2	1/25	1 Construct Envelope	Lecture 2 - Using SketchUp	Homework 2 - E+ Operation
		2 Basic Structure in E+	Lecture 3 - Input Bld/View Outputs	
W3	2/1	1 Use of Slab and Basement	Lecture 4 - E+ Slab/Basement	Homework 3 - Slab/Basement Simulation
		2 Model Heat Flow to Ground	Lecture 5 - E+ Slab Example	
W4	2/8	1 Set up Fenestration in E+	Lecture 6 - E+ Window Libraries	Homework 4 - Window5
		2 Use of Window 5	Lecture 7 - Window5	
W5	2/15	1 Air Handler Operation in E+	Lecture 8 - Air Flow-CAV-SD Syst I	Homework 5 - Air Flow CAV Simulation
		2 Const Air Vol. AHU Systems	Lecture 9 - Air Flow-CAV-SD Syst II	
W6	2/22	1 Air Handler Operation in E+	Lecture 10 - Air Flow-VAV-SD Syst I	Homework 6 - Air Flow VAV Simulation
		2 Var. Air Vol AHU Systems	Lecture 11 - Air Flow-VAV-SD Syst II	
W7	3/1	1 Chiller Operation in E+	Lecture 12 - Cooling Syst DX Chiller	Homework 7 - Water Chiller Simulation
		2	Lecture 13 - Cooling Syst Wtr Chillers	
W8	3/8	1 Boiler Operation in E+	Lecture 14 - Gas Furnaces	Homework 8 - Water Boiler Simulation
		2	Lecture 15 - Heating Syst Boilers	
	3/15	SPRING BREAK		
W9	3/22	1 EMCS Control Functions	Lecture 16 - EMCS Controls I	Homework 9 - EMCS Simulation
		2	Lecture 17 - EMCS Controls II	
W10	3/29	1 Complete E+ Building Sim	Lecture 18 - System Interactions	Homework 10 - Building Simulation
		2	Lecture 19 - System Interactions	
W11	4/5	1 Design/Simulation Team Bld.	"Studio time" - Open class discussion	Progress Report - Team Building Design
		2	"Studio time" - Open class discussion	
W12	4/12	1 Design/Simulation Team Bld.	Student presentations on their material	Progress Report - Team Building Design
		2	Student presentations on their material	
W13	4/19	1 Design/Simulation Team Bld.	"Studio time" - Open class discussion	Progress Report - Team Building Design
		2	"Studio time" - Open class discussion	
W14	4/26	1 Design/Simulation Team Bld.	Student presentations on their material	Progress Report - Team Building Design
		2	Student presentations on their material	
W15	5/3	1 Final Presentations	Design Presentation Review	Final Project Submittal / Presentations
		2 Final Presentations	Design Presentation Review	



Texas A&M University
Departmental Request for a Change in Course
Undergraduate ♦ Graduate ♦ Professional

• Submit original form and attachments •

Form Instructions

1. Request submitted by (*Department or Program Name*): Educational Psychology
2. Course prefix, number and complete title of course: EPSY 632 - Research in Second Language Education
Attach a brief supporting statement for changes made to items 3a thru 3d, and 6 below.
3. Change requested
 - a. Prerequisite(s): From: _____ To: _____
 - b. Withdrawal (reason): _____
 - c. Cross-list with: _____
Cross-listed courses require the signature of both department heads.
 - d. Change in course title and description. Enter complete current course title and current course description in item 5; enter proposed course title and proposed course description in item 6. Complete item 7 for change in title.
 - e. Change in course prefix, number, contact hours (lab & lecture), and semester credit hours. Complete item 7. **Attach a course syllabus.**
4. For informational purposes only, please indicate course number if this course will be stacked: _____
5. Complete current course title and current catalog course description: Research in Second Language Education. Studies related to the teaching/learning process in two languages and field methods for carrying out those studies.
6. Complete proposed course title and proposed catalog course description (not to exceed 50 words): Same as above

7. a. As currently in course inventory:

Prefix		Course #		Title (excluding punctuation)																						
E	P	S	Y	6	3	2	R	E	S	E	A	R	C	H	I	N	S	E	C	O	N	D	L	A	N	G
Level	Lab	SCH	CIP and Fund Code											Admin. Unit			FICE Code			Level						
0	3	0	0	0	3	1	3	1	4	0	1	0	0	0	4	0	9	2	0	0	0	3	6	3	2	6

b. Change to:

Prefix		Course #		Title (excluding punctuation)																										
B	I	E	D	6	3	2	R	E	S	E	A	R	C	H	I	N	S	E	C	O	N	D	L	A	N	G				
Level	Lab	SCH	CIP and Fund Code											Admin. Unit			Acad. Year			FICE Code										
0	3	0	0	0	3	1	3	1	4	0	1	0	0	0	4	0	9	2	0	1	0	-	1	1	0	0	3	6	3	2

Approval recommended by: _____ Level **6**

Dr. Victor Willson *Victor Willson Dec 22/10* _____ *Sandra Williams* 2-16-2011
 Department Head or Program Chair (Type Name & Sign) Date Chair, College Review Committee Date

_____ *Sandra Williams* 2-16-2011
 Department Head or Program Chair (Type Name & Sign) Date Dean of College Date

Submitted to Coordinating Board by: _____ *Ward W. Mead 3/23/11* _____
 Chair, GC or UCC Date

Associate Director, Curricular Services _____ Date _____ Effective Date _____
 Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
 Curricular Services - 09/10



Course Information

Course Number and Title	EPSY 632: Research in Second Language Education
Term	Spring, 2009
Meeting Times and Location	Wednesdays, 5:00-8:00 p.m. Harrington Tower 413

Course Description and Prerequisites

Course Description: Investigates studies related to the teaching/learning process in two languages and field methods for carrying out those studies.
Prerequisites: EPSY 611; EPSY 612 or consent of instructor

Learning Outcomes

- To develop an understanding of research design used in second language studies.
- To review current research in culturally and linguistically diverse settings.
- To analyze research studies in second language learning and teaching.
- To systematically develop skills and understanding of the research process in culturally and linguistically diverse settings.
- To compile own research data from culturally and linguistically diverse settings, to analyze those data and report the results in a systematic, organized and understandable way.

Instructor Information

Name	Dr. Y. Padrón
Telephone number	(979) 845-5625
Email address	ypadron@tamu.edu
Office hours	Mondays, 1:00-3:00 p.m.; Wednesdays, 2-4; or by appointment
Office location	107-E Harrington Tower

Textbooks and/or Resource Material

Brown, J.D. & Rodgers. T. (2002). *Doing second language research*. NY: Oxford University Press.
APA Publication Manual (5th ed., 2001).

Grading Policies

Assignments (1-4 each worth 5 points)	20 points
Class Presentation	15 points
Research Paper	20 points
Exam I	20 points
Exam II	25 points
TOTAL	100 points

GRADE SCALE									
A	100-90	B	89-80	C	79-70	D	69-60	F	--below 59
Please contact the instructor if absent or if unable to submit an assignment on the due date.									
Course Topics, Calendar of Activities, Assignments, Test Dates									
Week	Topic				Required Reading				
1	Research Paradigms in Second Language Research				Read Chapters 1 & 2				
2	Case Studies Research in Second Language Education				Read Chapter 3 Assignment 1 DUE: Introduction Outline				
3	Introspection Research in Second Language Education Return graded Assignment 1				Read Chapter 4				
4	Review of the Literature				Library research				
5	Classroom Research in Second Language Education Review for Exam				Assignment 2 DUE: Review of the Literature Study for Exam				
6	EXAM I				Read Chapter 5				
7	Descriptive Studies in Second Language Education Return graded exams Return graded Assignment 2				Read Handouts				
8	Correlational Research in Second Language Education Writing the Methods Section				Read Chapter 6				
9	Quasi-experimental Research in Second Language Education				Read Chapter 7 & 8 Assignment 3 DUE: Methods section				
10	Individual student conferences				Read Handouts on Experimental Research in Second Language Education				
11	Experimental Research on Second Language Education				Work on results section				
12	Return graded Assignment 4 Review for exam				Assignment 4 DUE: Results section due Complete Research Paper Prepare presentation				
13	Presentations of Studies				Research Paper DUE Study for Exam				
14	EXAM II Return graded Research Papers								

Other Pertinent Course Information	
This course will utilize a variety of instructional strategies. These will include cooperative learning activities, lectures, class discussion, partner activities, action research, and the use of technology.	
Americans with Disabilities Act (ADA)	
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu	
Academic Integrity	
<i>For additional information please visit: http://www.tamu.edu/aggiehonor</i>	
<i>"An Aggie does not lie, cheat, or steal, or tolerate those who do."</i>	
Helpful Websites	
Academic Calendar	http://admissions.tamu.edu/Registrar/General/Calendar.aspx
Final Exam Schedule	http://admissions.tamu.edu/Registrar/General/FinalSchedule.aspx
On-line Catalog	http://www.tamu.edu/admissions/catalogs/
Student Rules	http://student-rules.tamu.edu/
	The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07 .
Religious Observances	http://dof.tamu.edu/faculty/policies/religiousobservance.php