USC Use Only Number: Submission Date: Action-Date:

DEC 23 1997

UWUCC USE Only Number: Submission Date:

Action-Date:

CURRICULUM PROPOSAL COVER SHEET

1.	University-Wide Undergraduate Curroulum Committee  CONTACT
	Contact Person David L. Rodgers, Assistant Professor Phone 357-7692
	Department Department of Human Development and Environmental Studies
II.	PROPOSAL TYPE (Check All Appropriate Lines)
	ID 464 COURSE Contract Design I Suggested 20 character title
	New Course *Course Number and Full Title
	X Course Revision CS 464 Interior Planning and Drawing  Course Number and Full Title
	Liberal Studies Approval + for new or existing course Course Number and Full Title
	Course DeletionCourse Number and Full Title
	X Number and/or Title Change CS 464 Interior Planning and Drawing , Old Number and/or Full Old Title
	ID 464 Contract Design I  New Number and/or Full New Title
	X Course or Catalog Description Change ID 464 Contract Design I
	PROGRAM: Major Minor Track
	New Program *
	Program Revision*
	Program Deletion*
	Program Name
	Title Change Old Program Name
	New Program Name
III.	Approvals (signatures and date)  Mary E. Suunha 4/8/96  Department Curriculum Committee  Department Ghair
	My More Burber 3/6/97 College Curriculum Committee  Multiple Dean  Sollege Dean  Solle
	+ Director of Liberal Studies (where applicable) Provost (where applicable)

ID 464 Contract Design I

Prerequisite: ID 319

Applies interior design space planning and design problem solving processes to non-residential design, and links goals in interior design and facility management.

#### New Syllabus of Record 1.

# I. Catalog Description

3 credits 1 lecture hour 3 laboratory hours (1c-3l-3sh)

ID 464 Contract Design I

Prerequisite: ID 319

Applies interior design space planning and design problem solving processes to non-residential design, and links goals in interior design and facility management.

#### Course Objectives: II.

Upon completion of this course, the student will be able to competently:

- 1. Predict behavioral responses to physical attributes of non-residential spaces considering knowledge of human factors, proxemics, anthropometrics, and psychology
- 2. Analyze needs and requirements by interviewing, observing, and surveying owners and occupants, and state design problem in a program
- 3. Evaluate non-residential design programs, and synthesize space planning and interior design solutions by applying graphic standards and design theory to interpretations of needs and requirements
- 4. Utilize drafting, model making, color media, and computer aided drafting and design (CADD) to communicate contract design solutions visually
- 5. Demonstrate effective oral presentation skills
- 6. Apply principles of building structure, construction, building systems, and energy conservation to developing designs
- 7. Solve contract design problems confronting special populations, including physically challenged persons, the elderly, and others
- 8. Demonstrate ability to select, coordinate, and place contract furniture, fixtures, equipment (FF&E), materials, finishes, art, and accessories in space plans
- 9. Interpret and apply laws, codes, standards and ordinances in relation to non-residential health, safety and welfare needs and requirements
- 10. Describe environmental considerations influenced by organizational structure and facility management concerns

III. Detailed Course Outline

(Total hours: 56)

- A. Human factors in non-residential setting
  - 1. Psychology and the behavioral basis for design
  - 2. Physiology and anthropometrics
  - 3. Organizational sociology and proxemics
  - 4. Non-residential culture
- B. Non-residential Ergonomics
  - 1. Furniture
  - 2. Fixtures
  - 3. Equipment
- C. Non-residential user profile development
  - 1. Review literature
  - 2. Interview client(s) and occupant(s)
  - 3. Observe client(s) and occupant(s) behavior
  - 4. Survey
  - 5. Evaluate existing conditions and documents
  - 6. Analyze data and write program. Address such issues as:
    - a. Needs
    - b. Requirements
    - c. Goals
    - d. Assumptions
    - e. Architectural parameters
    - f. Functional relationships and affinities
    - g. Budget
    - h. Schedule
    - i. State the problem
- D. Planning and design of non-residential spaces
  - 1. Strategic asset management
  - 2. Office spaces
    - a. General offices and multiple workstations
    - b. Private offices
    - c. Electronic workstations
    - d. Conference rooms
    - e. Reception areas
  - 3. Hospitality spaces
    - a. Restaurants
    - b. Bars
    - c. Hotel
    - 2000 1 -0---

- b. Banks
- c. Department Stores
- 5. Public restrooms, toilets, and coatrooms

- A. Facility management (FM) theory
  - 1. Strategic asset management
    - a. Personnel
    - b. Facilities
    - c. Furniture
    - d. Fixtures
    - e. Equipment
  - 2. Organizing the FM process
    - a. Defining facility management quality
    - b. Planning strategically
    - c. Organizational theory
      - 1. Centralization
      - 2. Decentralization
      - 3. Managing environmental change
  - 3. Planning and managing workspace
    - 1. Managing space
    - 2. Space management and organizational culture
  - 4. Assessing performance
    - a. Assessing building performance
    - b. Assessing FM performance
    - c. Post-occupancy evaluation
- B. Public zones
- C. Semi-private zones
- D. Private zones
- E. Support and functional zones

WEEK THREE: Non-residential Space Standards, Block Planning, and Stacking (four hours)

- A. Non-residential space standards for furniture selection and placement
- B. Circulation patterns and requirements
- C. Site considerations and site planning
- D. Developing floor plan criteria

F. Stack planning
WEEK FOUR: Schematic Designing (four hours)
A. Developing preliminary design concepts: Schematic designing     B. Design concept perspective views
WEEK FIVE: Design Concept Development:
A. Drafting fundamentals review: Working drawings
<ol> <li>Site plans</li> <li>Floor plans</li> <li>Elevations</li> <li>Sections</li> <li>Detailing and technical drawings</li> <li>Reflected ceiling plan</li> <li>Schedules, keys, and legends</li> <li>Furniture, fixtures, and equipment (FF&amp;E) specifications</li> <li>Materials boards</li> </ol>
10. Presentation  B. Non-residential structure and construction review
<ol> <li>Commercial and institutional building</li> <li>Floor systems</li> <li>Wall systems</li> <li>Heating, ventilating, air-conditioning, and cooling</li> <li>Eiectrical systems</li> <li>Lighting</li> </ol>
WEEK SIX: Design Development Continued: Integrating Interior Architecture and Interior  Design
<ul> <li>A. Selection and application of materials</li> <li>1. Finish materials</li> <li>2. Textiles and floor treatments</li> <li>3. Wall treatments</li> <li>a. Paint</li> <li>b. Wallpaper</li> </ul>
B. Accessories C. Art work D. Model design and construction  (four how
WEEK SEVEN: Building Systems(four how

2. Plumbing systems 3. Acoustics 4. Lighting MID-TERM BREAK WEEK EIGHT: Regulations, Laws, Standard, Ordinances and A. Universal accessibility guidelines B. Health and life safety codes, regulations and standards E. Specifying and estimating F. Project management 1. Scheduling 2. Constructing space and components 3. Installing 4. Managing contractors A. Client interview: Understanding user participation in the design process B. Reviewing existing project documents and measuring the site C. FF&E D. On-site observations and interviews E. Problem analysis and writing the program F. Program graphics A. Researching FF&E B. Interacting with manufacturers' representatives C. Field trip: Vendors and Other Consultants WEEK ELEVEN: Completing the Program ...... (four hours) A. Program graphics (continued) B. Obtaining consent for commencing design development WEEK TWELVE: Ideation and Space Planning ......(four hours) A. Interpreting the program 1. Creating schematic designs 2. Iterative process: Repeating program review 3. Developing design concepts: Synthesis

1. Electrical system

B. Preparing project documents: working drawings

C. Preparing pictorial views

D. Developing a space model

- A. Completing working drawings
- B. Rendering drawings
  - 1. Monochromatic development
  - 2. Color media applications

WEEK FOURTEEN: Concluding Concept Development ......(four Hours)

- A. Editing, printing, completing, assembling, and mounting drawings
- B. Completing the model

Culminating Event: Presenting Non-residential Design Concept to the Client (final exam)

- A. Present concept drawings, model(s), specifications
- B. Respond to questions

#### IV. Evaluation Methods

Grades for projects, quizzes, exercises, and participation will determine the final grade for the course in the following proportions:

#### Grading Scale:

100% - 90% A 89% - 80% B 79% - 70% C 69% - 60% D

59% - 0% F

Total:

The course grade will be weighted according to the following percentages:

# Course Grade Percentages:

Projects<sup>1</sup> 60.0% Exercises<sup>2</sup> 20.0% Quizzes<sup>3</sup> 10.0% Special assignments<sup>4</sup> 5.0% Participation: 5.0%

100.0%

<sup>1</sup>Projects include applying space standards to develop floor plans and furniture plans.

<sup>&</sup>lt;sup>2</sup>Exercises include conducting space adjacency analysis, developing matrixes, and creating block plans

<sup>3</sup>Quizzes will concern information covered in the course. Answers to some problems may require graphic solutions.

#### ٧. Required Textbooks, Supplemental Books, and Readings

### Required texts:

Duerk, D. P. (1993). Architectural programming: Information management for design. New York: Van Nostrand Reinhold.

Harris, D. A., Engen, B. W. & Fitch, W. E. (1991). Planning and designing the office environment.

# Supplemental Books and Readings

Ballast, D. K. (1992). Interior design reference manual. Belmont, CA: Professional Publications.

Doyle, M. E. (1993). Color drawing, Rev. ed. New York: Van Nostrand Reinhold

Karlan, M. (1993). Space planning basics. (1993). New York: Van Nostrand Reinhold.

Kirkpatrick, B. L. & Kirkpatrick, J. M. (1994). AutoCAD for interior design and space planning. New York: Merrill, an imprint of MacMillan.

Null, R. L., Ph. D. & Cherry, K. (1995). Creative solutions for ADA compliance. Belmont, California: Professional Publications, Inc.

Omura, G. (1992). Mastering AutoCAD release 12. Alameda, California: Sybex.

Wakita, O. A. and Linde, R. M. (1984). The orofessional practice architectural working drawings. New York: John Wiley & Sons.

<sup>1</sup>Additional supplemental books and readings to be announced in class.

## VI. Special Resource Requirements

#### Equipment List

\*Ten 3 1/2-inch high density doublesided floopy disks

\*Mechanical pencils:

Lead holder (traditional) and pointer (snarpener)\* 5mm mechanical pencils (at least three) One 7mm mechanical pencil

<sup>&</sup>lt;sup>4</sup> Special assignments may include developing project journals, reporting information gathered on field trips, and investigating research topics related to course content.

5mm Leads: HB. H, 2H, 4H. Note: In this lead series, HB is the softest, and 4H is the hardest.

5mm non-photo blue lead. Note. When lightly applied for layout purposes, this lead may not appear in reproductions when not erased.

\*Conventional, graphite, wood-encased pencils for sketching: HB, H, 2H, 4H (at least one each)

\*Drafting tape or drafting dots. Note: Do not confuse with masking tape. Recommended: One roll of transparent tape to make repairs.

\*Veilum:

Note: veilum is translucent crawing material designed to allow light to pass through it to make tracings and prints. Do not substitute tracing paper for veilum.

Individual sheets of 24° x 36° vellum. Initial purchase: Five

Notebook or individual sheets of vellum to make 8 1/2" x 11" layouts

\*Triangles

45 degree (8° minimum; 4° and 12° or larger recommended as well)

60 degree (8° minimum; 4° and 12° or larger recommended as well)

Adjustable triangle\*

\*Circle template(s): Note: Select template circles to include 3\* circle

\*Furniture, fixture, and equipment templates

\*French curve(s)

\*Isometric ellipse template: Note: Isometric ellipses are designed using 30° and 60° plan axes.

\*Compass

\*Erasers:

White block eraser

Kneaded eraser

Eraser holder and erasers

Erasing shield

Drafting brush

\*Architectural scale (12\* minimum). Note: Do not substitute engineer's scale for architect's scale. An engineering scale has base ten dimensions, whereas the architect's scale is based 12 inches to the foot. Both scales are triangular in cross section. Recommended: A six-inch bevel scale

"Yellow tracing paper, one roll, 12" wide minimum

\*Technical drawing pens linking pensi. Select a range of three to four pens with fine, medium, and wide tips

\*Color pencils and markers. Note: Selecting a range of warm, cool, and neutral color pencils and markers will be discussed in class.

\*Drawing board(s)1. Note: Drawing boards for home use should have a Borco vinyl surface.

\*T-square1

\*Portfolio\* (May be constructed)

\*Tube document carrier1

\*Model making tools and materials. Note: Requirements will be discussed in class prior to assignments. Tools and materials will include knives and paper boards.

\*Journal notebook. At least 8 1/2" x 11" format recommended. Note: To be discussed in class

\*Retractable metal measuring tape, 16 feet minimum, 20 feet preferred

\* Recommended but not essential

VII. Bibliography

Ambrose, J. (1991). <u>Building construction: Interior systems</u>. New York: Van Nostrand Reinhold.

Arends, M. (1990). <u>Interior presentation sketching for architects and designers</u>. New York: Van Nostrand Reinhold.

Becker, F. (1990). The total workplace: Facilities management and the elastic organization.

New York, Van Nostrand Reinhold.

- Ching, F. (1987). Interior design illustrated. New York: Van Nostrand Reinhold.
- Deasy, C. M. (1990). <u>Designing places for people: A handbook on human behavior for architects, designers, and facility managers</u>. New York: Whitney Library of design.
- Doyle, M. E. (1993). Color drawing. New York: Van Nostrand Reinhold.
- Flynn, J. E., Kremers, J. A., Segil, A. W., & Steffy, G. R. (1992). <u>Architectural interior systems</u>. New York: Van Nostrand Reinhold.
- Frederickson, J. M. (1989). <u>Designing the cost-effective office: A guide for facilities planners</u> & managers. New York: Quorum Books.
- Green, W. R. (1991). The retail store. New York: Van Nostrand Reinhold.
- Hoke, J. R. (Ed.) (1988). <u>Architectural graphic standards</u>. (8th Ed.) New York: John Wiley & Sons.
- Jefferis, A. & Madsen, D. A. (1991). <u>Architectural drafting & design</u>. Albany, New York: Delmar Publishers Inc.
- Kazarian, E. A. (1989). Foodservice facilities planning. New York: Van Nostrand Reinhold.
- Kotschevar, L. H. & Terrell, M. E. (1985). <u>Foodservice planning: layout and equipment</u>. New York: McMillan.
- Lam, W. M. C. (1992). <u>Percention & lighting as formgivers for architecture.</u> New York: Van Nostrand Reinhold.
- Leibrock, C. (1993). Beautiful barrier-free. New York: Van Nostrand Reinhold.
- Lockhard, W. K. (1991). <u>Freehand perspective for designers: Including shadow-casting and entourage</u>. New York: Pepper Publishing.
- Lopez, M. J. (1986). Retail store planning & design manual. New York: National Retail Merchants Association.
- Pena, W. M., Parshall, S. A., & Kelly, K. A. (1987). <u>Problem seeking: An architectural programming orimer</u>. 3rd ea., Wasnington, D. C.: AIA Press.
- Pile, J. (1995). Interior design (2nd. Ed.). Englewood Cliffs, New Jersey: Prentice Hall
- Porter, T. (1990). Architectural drawing. New York: Van Nostrand Reinhold.
- Preiser, W. F. E. (1993). Facility programming. New York: Van Nostrand Reinhold.

- Ramsey, C. and Sleeper, H. (1990). <u>Architectural graphic standards</u>. New York: John Wiley & Sons.
- Smith, F. K. & Bertolone, F. J. (1986). <u>Bringing interiors to light</u>. New York: Watson-Gupt Publications.
- Steffy, G. R. (1990). Architectural lighting design. New York: Van Nostrand Reinhold.
- White, E. T. (1986). Space adjacency analysis. Tucson: Architectural Media, Ltd.

## Historical References (Prior to 1985)

- Ching, F. (1985). Architectural graphics. New York: Van Nostrand Reinhold.
- French, T. E., and Svensen, C. L. (1966) <u>Mechanical drawing</u>. St. Louis: McGraw-Hill Book. Company.
- Gill, R. (1979) Basic perspective. (2nd Ed. London: Thames and Hudson.
- Gill, R. W. (1979) Creative oerspective. 2nd ed. London: Thames and Hudson, 1979.
- Hall, E. T. (1966). The hidden dimension. New York: Double Day & Company.
- Hauf, H. (1970). <u>Architectural graphic standards</u>. New York: Wiley-Science Interscience Publication.
- Hornung, William J. (1971) Architectural drafting. (5th Ed.). Englewood Cliffs, N. J.: Prentice Hall.
- Laseau, P. (1980). Graphic thinking for architects and designers. New York: Van Nostrand Reinhold.
- Panero, J. & Zeinik, M. (1979. <u>Human dimension and interior space</u>. New York: Watson-Guptil
- Reznikoff, S. C. (1979). <u>Interior graphics and design standards</u>. New York: Watson-Guptill Publications.
- Sanoff, H. (1977). <u>Methods of architectural programming</u>. Stroudsburg, Pennsylvania: Dowden, Hutchinson, and Ross.
- Sommer, R. (1969). <u>Personal space: The behavioral basis of design</u>. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- White, E. T. (1972). A graphic vocabulary for architectural presentation. Tucson: Architectural Media.

# 2. Summary of proposed revisions

Revisions are as follows:

- \*Prefix change
- \*Course number/name change
- \*Course description change
- \*Course objectives/topics change

# 3. Justification and rationale for the revisions.

\*Prefix change

The prefix change is consistent with the revised curriculum prefix.

\*Course number/name change

The course number and name are changed to reflect sequencing in the revised ID program. This course is the first of two contract design courses.

\*Course description change

The description is changed to reflect content accurately.

\*Course objectives/topics change.

Objectives are rewritten to meet 1996 Foundation for Interior Design Education Research (FIDER) accreditation standards cited in Appendix A.

Text: Curran, June (ATED). <u>Drawing Home Plans: A Simplified Drafting system for Planning and Design</u>. Bakersfield California: Brooks Publishing Company, 1979.

eferences: Parsey, Charles and H. R. Sleeper. Architectural Graphic Standards,

New York: John Wiley and Sons, 1956.

Hartwigsen, Gail. Design Concepts. Boston: Allym and Bacon, Inc., 1986.

# Objectives: The student will:

- 1. become cognizant of the relationship of human need and life-space design.
- 2. critically aralyte existing floor plans in terms of user suitability.
  3. apply drafting and rendering skills to communicate design solutions.
- 4. develop and utilize various media and presentation techniques.

#### Course Cutline:

- Milespace Planning
  - A. Private spaces
  - 3. Group spaces
  - C. Support spaces
  - D. Bermier-inee design

## II. Drafting

- A. Equipment
  - 1. Drawing board
  - 2. Perciis
  - Architectural scales
  - الم كتوساتج عادة
    - a. Tamiates
    - b. Eraser shield

    - c. Transies
- 3. Matemais
  - i. Graph paper
  - 2. Drawing sin
  - 3. Grids

  - 1. Water color paper
    5. Poster/Illustration/Matte Board
  - 5. Percis
  - 7. Pen and ink
  - ë. Color media

# III. Architectural lettering

- A. Styles
- 3. Techniques

## Drawing Floor Flans

- A. Scale
- 3. Symmols
- Cimerators
- 2. Presentation techniques

### V. Rendering

- A. Elevations
- B. Perspective

Course Outline: (continued)

### VI. Media

- A. Watercolor
  - 1. Opaque

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- a. Acrylic b. Tempera
- 2. Transparent
  - a. Cake
  - b. Tube
  - c. Pens
- 3. Colored pencils
- C. Scratch board
- D. Fen and ink

# VII. Techniques

- A. Flat wash
- 3. Graded washC. Laid-on color
- D. Wet into wet
- E. Ink wash
  F. Pen and ink with watercolor wash

CN/ik 12/2/80

## Bibliography:

- 1. Adams, Anthony. Your Energy Efficient House: Building and Pemodeling Ideas. Charlotte, VI; Garden Way Pub., 1975.
- 2. American Society of Landscape Architects Foundation. <u>Landscape Planning</u> for Energy Conservation. Feston, VA; Environmental Design Press, 1977.
- 3. Avery and Null, Environmental Design Laboratory Guide.
- 4. Barley, Maurice. The House & Home, Greenwich, Cinciprati: New York Geographic Society, 1971.
- 5. Bedrar, Michael. Barrier-free Environments, PA: Dowden, Hutchinson & Ross, 1977.
- 6. Brolin, Brent C. The Failure of Modern Architecture, New York: Van Nostrand Reinhold Co., 1976.
- 7. Dosmann, Raymond F. An Environment for People. New York: Public Affairs Pamphlet 421, 1968.
- 6. Eldridge, Evelyn and Mancy Meredith, eds. Environmental Issues: Family Impact, MN: Burgess Pub., 1976.
- 9. Faulkmer, Ray and Sarah. <u>Inside Today's Home</u>, New York, New York. Holt, Rinehart and Winston, 1966.
- 10. Green, Issac. Housing for the Elderly, New York: Van Nostrand Feinhold Company, 1975.
- 11. Gottlieb, Lois Daviison. <u>Environment ani Design in Mousing</u>, New York: Macmillan, 1965.
- 12. Guptill, Arthur L. <u>Fendering in Fen and Ink</u>, New York: Watson-Guptill Publishing Company, 1976.
- 13. Harkness, Sarah P. and James Groom. <u>Building Without Rarriers for The Disabled</u>, New York: Watson-Guptell, 1975.
- 14. Hesselgren, Sven. Man's Perception of Man Made Environments, Dowden, Hutchinson and Ross, 1975.
- 15. Knowles, Ralph. Energy and Form: An Ecological Approach to Orban Growth, Cambridge, Mass: MET Press, 1974.
- 16. Leavitt, Mary J. and Harry Leavitt. The Energy Orisis, Learning Activity Package, Seattle, WA: Unigraph, 1977.
- 17. Magrani, Franco. <u>Interiors for Today</u>, New York: Whitney Library of Design, 1975.
- 13. Michelson, William, Behavioral Research Methods in Environmental Design, Dowler, Autoninson & Ross, 1975.
- 19. Mils, Madolia Massey. <u>Energy Conscious Design Tenggines</u>. Monticello, II: Council of Flagging Library 273, 1973.

### Appendix A

## Relevant FiDER Criteria Addressed in This Course

FIDER Standards and Guidelines, Professional Level Programs, FIDER Form 402R, January 1996

#### 2.9 Basic and Creative Arts

- 2.9.1 Studio: 2-D design fundamentals
- 2.9.2 Studio 3-D design fundamentals

### 2.10 Interior Design

- 2.10.1 Design process, i.e. programming, conceptualization, problem solving, and evaluation
- 2.10.5 Space planning, non-residential
- 2.10.7 Furniture selection and layout, non-residential
- 2.10.8 Application of design elements and principles, i.e. color, texture, and scale
- 2.10.9 Selection and application of finish materials, i.e. textiles, floor treatments, and wall treatments
- 2.10.10 Selection and application of decorative elements, e.g. accessories, artwork, etc.

### 2.11 Technical Knowledge

- 2.11.3 Laws, codes, standards, and regulations, e.g. universal accessibility guidelines, life safety, fire, etc.
- 2.11.5 Construction systems and materials
- 2.11.6 Building systems, i.e. electrical, acoustics
- 2.11.7 Building systems, i.e. HVAC, plumbing

### 2.12 Communications Skills

- 2.12.1 Visual presentation, i.e. sketching, rendering, sample boards
- 2.12.4 Working drawings, including drafting, lettering, symbols, dimensioning
- 2.12.5 Computer, i.e. CADD, word processing, and graphics