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



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	University-Wide Undergraduate Curriculum Committee
1.	CONTACT
	Contact Person Whit Watts Phone 357-2250
	Department Geography & Regional Planning
11.	PROPOSAL TYPE (Check All Appropriate Lines)
	X COURSE RP353 Planning Design I Suggested 20 character title
	X New Course* RP353 Planning Design I Course Number and Full Title
	Course Revision
V.	for new or existing course Course Number and Full Title
3 200	Course DeletionCourse Number and Full Title
RECE	Old Number and/or Full Old Title
	New Number and/or Full New Title
	Course or Catalog Description Change
	PROGRAM: Major Minor Track
) 9	New Program *Program Name
3 2000	Program Revision*Program Name
5 -	Program Deletion*
A RA	Title Change
III.	Approvals (signatures and date)
	Department Curriculum Committee Department Chair 4/19/99
· ·	College Curriculum Committee 9 Separation Ida 9/22/99 College Curriculum Committee 9 College Dean
-	+ Director of Liberal Studies (where applicable) *Provost (where applicable)

## RP 353 Syllabus

I. Catalog Description

RP 353/ Planning Design I Prerequisites: None

3 credits 0 lab hours 3 lecture hours (3c-01-3sh)

Introduces students to professional graphic communications. Emphasis is placed on the use of 2-D Computer Aided Design (CAD) applications, plan graphics and professional standards to represent and solve basic physical planning problems.

#### II. Course Objectives

- 1. Students will develop a working familiarity with CAD technology.
- 2. Students will demonstrate a familiarity with CAD technology to illustrate and solve simple site planning problems at a variety of scales.
- 3. Students will be able to use CAD technology to assemble a basic site and environmental inventory for use in a cluster land development proposal.
- 4. Students will produce three "portfolio quality" plan graphics.

#### **III. Detailed Course Outline**

#### A. The CAD Environment

(2 weeks)

- 1. Preferences and Overlays
- 2. Lines, Attributes and Constraints
- 3. Defaults, Dimensioning

#### **B.** Drawing Basics

(2 weeks)

- 1. Drawing by Mouse, Data Display and Dialog Box
- 2. Scale, Grids, Navigation, and Fitting
- 3. Format and Graphic Conventions
- 4. Cutting, Trim, Fillets

#### C. Application I: Code Illustration

(1 week)

- 1. Streets, Curbs, Setbacks, ROWs
- 2. Lot size and Placement
- 3. Local Standards and Regulations

#### D. Stationary and Templates

(1 week)

- 1. Text and Title Components
- 2. Setting Up Layers
- 3. Creating a Stationary File

### E. Creating Objects

(1 week)

- 1. Creating a Sheet
- 2. Creating Simple Objects

# F. Creating Symbols 1. Symbol Types and Libraries 2. Industry Conventions

## G. Application II: Developing a Symbol Library (1 week)

- 1. Creating a Symbol Library
- 2. Graphic Standards
- 3. Delineation

#### H. Simple 3-D Projections

(2 weeks)

(1 week)

- 1. Types of Projections
- 2. Layers at Different Elevations
- 3. 3-D Sections

### I. Application III: 3-D Modeling

(1 week)

- 1. Digital Elevation Modeling
- 2. Hybrid 3-D Objects on a Site

#### J. Final Project: Cluster Subdivision

(2 weeks)

- 1. Primary Conservation Areas
- 2. Secondary Conservation Areas
- 3. Open Space Development Potential
- 4. Density, Yield and Home Sites
- 5. Street Standards and Lot Layout
- 6. Rendering

#### **IV. Evaluation Methods**

The Final Grade for the course will be determined by the following:

70% Three Studio Application Exercises

20% Final Project (culminating presentation)

10% Class participation

#### **Grading Scale**

A = 90-100%

B = 80 - 89%

C = 70-79%

D = 60-69%

F = < 60%

#### V. Required Texts

Kent, J. (1997) Mini CAD Tutorial, Improbability Press, CA.

Arendt, R. (1996) Conservation Design for Subdivisions, Island Press

**RP353 Classroom Packet** 

#### VI. Special Course Requirements

Students will be expected to spend considerable time in our Cartography Lab, Room 8 Leonard Hall.

#### VII. Select References

Ambrose, J, (ed), Site Details, (1992) AIA Wiley, New York.

Ambrose, J. and P, Brandow (1992) Simplified Site Design, Wiley, New York.

Beer, A. (1990) Environmental Planning for Site Development, Spon, London.

Blanc, A. (1996) Landscape Construction and Detailing, ASLA Press, Washington.

Center for Watershed Protection, (1996) <u>Site Planning for Stream Protection</u>, ASLA Press. Washington.

Chester County Planning Commission (1995) <u>Chester County Circulation Manual</u>, Chester County.

Colley, B. (1993) Practical Manual of Land Development, McGraw Hill, New York.

Driskell, D. (1995) <u>Universal Access to Outdoor Recreation</u>, PLAE, Berkely.

Foster, M. (1999) <u>Diagramming: A Visual Design Process</u>, Wiley, New York.

Freilich, R and M. Shultz (1995) Model Subdivision Regulations, Planners Press, Chicago.

Jarvis, F. (1993) Site Planning and Community Design, NAHB, Washington D.C.

Landphair, H. and J. Motloch (1985) <u>Site Reconnaissance and Engineering</u>, Prentice Hall, New Jersey.

Listokin, D. and C. Walker (1993) <u>The Subdivision and Site Plan Handbook</u>, Rutgers, New Jersey.

Mertes, J. and J. Hall (1996) Parks Recreation Open Space and Greenway Guidelines, ASLA.

NAHB (1987) Land Development, Home Builders Press, Washington.

Norman, D. (1988) The Design of Everyday Things, Doubleday, New York.

Strom, S. and K, Nathan (1998) <u>Site Engineering for Landscape Architects</u>, (3rd Ed.) Reinhold, New York.

Tufte, E. et al (1997) <u>Visual Explanations: Images and Quantities, Evidence and Narrative</u>, Graphics Press, Connecticut.

Virginia Department of Conservation and Recreation (1987) <u>Virginia Erosion and Sediment Control Manual</u>, Division of Soil and Water, Richmond.

#### 2 Course Analysis Questionnaire

## 5

#### A. Details of the Course.

- A1. This course will be a core course for a B.S. in Regional Planning.
- A2. This course will be a prerequisite for RP 354 Planning design II. The course revision proposal has been attached.
- A3. This course has never been offered
- A4. This is a dual level course
- A5. This course is not to be taken for variable credit.
- A6. Similar courses are offered at these institutions.

Virginia Tech California Polytechnic State University University of Virginia MIT Curtin University of Technology University of Illinois Vienna University of Technology

A7. While no accreditation board requires a CAD/CAM course virtually all physical planning courses (which are required by ACSP) are taught using digital technology.

#### **B.** Interdisciplinary Implications

- B1. A single instructor will teach this course.
- B2. This course does not overlap with other university course offerings.
- B3. Seats will be made available to students in the School of Continuing Education upon request.

#### C. Implementation

C1. The proposed new course changes will change the teaching load of Dr. Watts. The dean has approved our next position hire (a retirement replacement) and that person will absorb a course currently taught by Dr. Watts. In fall 2000 the course will be covered by Robert Wilson picking up the teaching of Introduction to Planning—he is currently in a non-teaching faculty position and could continue to teach a course.

#### C2 Other Resources

- a. Current space allocations are sufficient to offer this course.
- b. No additional equipment will be required to support this course.
- c. The department's budget is sufficient to purchase supplies for this course.
- d. Regional library holdings are adequate.
- e. No travel costs are associated with this course.
- C3. No grant funds will be used to support this course.
- C4. This course will be offered once a year.
- C5. One section of this course will be offered at a time.
- C6. Eighteen students will be accommodated in this course. This number represents the maximum enrollment we would anticipate among our planning students.
- C7. The APB places no restrictions on the size of course offerings.

#### D. Miscellaneous

No additional information is necessary