

# Curriculum Proposal



Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

		(Check all that apply):		Proposal #	99
College:	Science, Engineering and Technology	<input type="checkbox"/>	Undergraduate	Effective Date of Change:	
Department:	Interior Design and Construction Management	<input type="checkbox"/>	Graduate	Academic Year	05
Program:	Construction Management	CIP #		(For Office Use Only)	
Type of Change	COURSE PROPOSALS			Course Designator and Number	Number of Credits
Proposed:	Change in Credits			ID 281	04
Title Current:	Architectural Graphics			ID 281	03
Title Proposed:				(if applicable)	
24-Char. Abbrev:					

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):

For contractors and designers working in a collaborative process. Emphasis on plan design reading, introduction to architectural hand drafting and CAD, architectural symbols, vocabulary, lettering and three-dimensional illustration techniques.

### Rationale or Justification for change:

Curriculum changes are based upon accreditation standards and National Association of Schools of Art and Design recommendations. Classroom time spent on mechanical drafting techniques will be reduced. Intro to CAD will be added. Drafting assignments will consume 15 hours less class time.

### \*\*\*For General Education or Cultural Diversity Courses Only\*\*\*

#### General Education Course:

GE Category #    GE Category Name (Maximum of 3 Categories)

N/A
N/A
N/A

- For Writing Intensive Courses, attach a description of the kind and quantity of writing.
- For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes associated with each GE competency or CD designation.
- List of strategies to be used to assess students' achievement of each GE competency or CD designation.

#### Cultural Diversity Course:

(Please check one.)

- Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
- Related (At least 25% devoted to the above topics or to a global perspective on topics related to African American, Asian, Hispanic, and Native American inhabitants of the United States.)

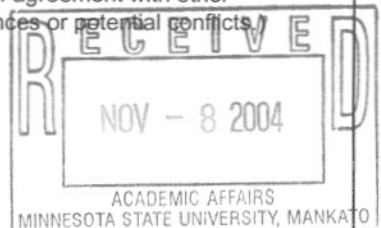
### \*\*\*For New Courses\*\*\*

(Check all that apply):	Instructional Type: <input type="checkbox"/> Lecture/Lab	Course will be offered:
<input type="checkbox"/> Course is an elective.	Grading Format: <input checked="" type="checkbox"/> Grade <input type="checkbox"/> P/N	<input checked="" type="checkbox"/> Fall Semester
<input checked="" type="checkbox"/> Course is required for program		<input checked="" type="checkbox"/> Spring Semester
<input type="checkbox"/> Pre- or Co-requisites:		<input checked="" type="checkbox"/> Summer Session
<input type="checkbox"/> Other courses are being changed or eliminated. (Explain.)		

Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes.
- A list of resources required to offer and support this course.
- A description of how teaching this course will affect department staffing.
- If 400/500 level course, an explanation of added expectations of graduate students.






Minnesota State University, Mankato  
Curriculum Proposal

\*\*\*Signature Page\*\*\*

**Department**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

  
 Department Chair

10/18/04  
 Date

Comments:

**College Curriculum Committee**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

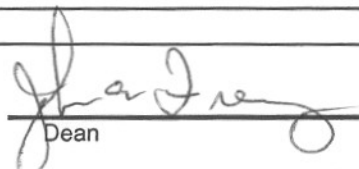
  
 Committee Chair

11/4/04  
 Date

Comments:

**College Dean**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

  
 Dean

11/05/04  
 Date

Comments:

**General Education Subcommittee**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

\_\_\_\_\_  
 General Education Subcommittee Chair Date

Comments:

**Undergraduate Curriculum and Academic Policy Committee**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

\_\_\_\_\_  
 UCAP Faculty Chair Date

Comments:

**Faculty Association Graduate Committee**

Recommended  
 Not Recommended

\_\_\_\_\_  
 Faculty Association Graduate Chair Date

Comments:

**Graduate Dean**

Recommended  
 Not Recommended

\_\_\_\_\_  
 Graduate Dean Date

Comments:

**Academic Affairs Council**

Recommended (Category/ies \_\_\_\_\_)  
 Not Recommended (Category/ies \_\_\_\_\_)

\_\_\_\_\_  
 Assistant Vice President Date

Comments:

**Senior Vice President and Vice President for Academic Affairs**

Approved (Category/ies \_\_\_\_\_)  
 Not Approved (Category/ies \_\_\_\_\_)

\_\_\_\_\_  
 Sr. Vice President / Vice Pres. Academic Affairs Date

Comments:

# **ID 281: Architectural Graphics**

## **Course Syllabus**

### **Course Description:**

For contractors and designers working in a collaborative process. Emphasis on plan design reading, introduction to architectural drafting and CAD, architectural symbols, vocabulary, lettering and three-dimensional illustration techniques.

### **Text:**

Building Construction Illustrated, Ching

### **Course Goal:**

Develop competencies in the identification, analysis, solution, preparation, and presentation for design problems as they relate to drafting techniques and the human environment.

### **Course Outcomes:**

- Develop skills and obtain knowledge necessary to be proficient in the competencies of space planning and basic hand drafting and computer-aided design.
- Research and formulate function, architectural, spatial and aesthetic programs.
- Emphasize use of design elements and principles in the development of compatible aesthetic solutions.
- Develop skills and techniques for communicating design solutions.
- Develop plan reading skills

### **Performance Policy:**

Interaction in the studio between the individual student designer and the instructor is an integral part of the course experience and the individual's growth. Group interaction with the instructor is a necessary component of the lecture and the discussion schedule. Projects that are not developed during class will not be accepted. Assignment due dates are noted on the schedule. There will be a research component relating to the final research project to be included in a notebook. Two unexcused absences result in one letter grade reduction in the student's final grade.

### **Evaluation:**

In class exercises will be given to determine student progress. Separate evaluations will be given for each phase of the project based upon ability, accuracy of drawings, compositions, and understanding of assignments. Late assignments will be devaluated one full letter grade if not completed by assigned due date and one full letter grade for each additional day late.

### **Grading Scale:**

90 – 100	A	30%	Design projects
80 – 89	B	60%	Final Design Project
70 – 79	C	5%	Plan Reading Exercise
60 – 69	D	5%	Lettering
00 - 59	F		

### **Supply List:**

Those materials required to successfully complete projects and course requirements.

### **Instructor:**

Ryan J. Langemeier, AIA,

Office: WC B-126/WC 349B

Office Phone: 389-2064

Office Hours by appointment: Sign up sheet in office.  
MW Office location WC B-126  
TH Office location WC 349B

## **Student Responsibilities:**

*Reprinted from the Minnesota State University, Office of Judicial Affairs website,  
<http://www.mankato.msus.edu/dept/judicial/body.html#a>*

Listed below are the responsibilities that undergraduate and graduate students accept through membership in the learning community of Minnesota State University. The primary expectations of community members are integrity and civility. Each student should approach academic endeavors, relationships and personal responsibilities with a strong commitment to personal integrity and interpersonal civility. In support of these two core values, the following Statement of Student Responsibilities is developed.

1. Individuals will fulfill their academic responsibilities in an honest and forthright manner.

Examples of violating behavior include: plagiarism (such as using another's phrasing, concepts or line of reasoning as your own); submitting course assignments that are not your own; submitting the same paper in different classes without prior approval from both instructors; cheating on assignments, laboratory reports or examinations; acquiring or using test materials without faculty knowledge; failure to follow class policy; obtaining academic benefits through computer fraud; violation of computer procedures; engaging in academic fraud alone or with others.

Probable sanction: course/academic major sanctions, University disciplinary probation, suspension or expulsion.

2. Individuals will respect and foster the academic endeavors of other members of the University community.

Examples of violating behavior include: harassment of a faculty member; disrupting teaching or research; excessive noise that disrupts classes, studying or University activities that seriously disrupt learning.

Probable sanction: University disciplinary probation, suspension or expulsion.

## **Assistance Available:**

If you are a student with disabilities and will need academic accommodations, please meet with the course instructor as early in the term as possible to discuss your needs. Every attempt will be made to accommodate students who have a documented disability.

## ID Architectural Graphics Schedule

- Week 1  
Introduction  
M/T – Review course syllabi and course objectives from page one.  
Discuss course supply list – professor will have examples to show in class.  
W/H - Discuss contract documents, i.e., plans and specifications.  
Discuss the design process and the phases through construction administration.
- Week 2  
Plan Reading / Definitions, Drafting Techniques (Architectural and Engineering)  
M/T - Plan reading exercise and each student shall review one set of contract document drawings.  
W/H - Begin introduction drawing exercise. Professor to present the proper drawing techniques in regard to symbols, floor plans and reflected ceiling plans.
- Week 3  
Drafting Techniques: Line Weights, Lettering  
M/T - Introduce proper lettering techniques: project one: lettering exercise. See attached for description.  
W/H - Introduce proper drafting techniques: line-weights and basic shapes.  
Project two and three – see attached for description.
- Week 4  
Drafting Techniques: Line Weights, Basic Shapes  
M/T - Brief overview of “W/H” lecture. Continue work on vignette two and three. Project two and three due week 5 M/T
- Week 5  
Drafting Techniques / Project  
M/T - Discuss the process of field verifying existing conditions and the purpose of obtaining accurate notes. Lecture on as-built drawings.  
Project Four: in DYADS measure and draw existing conditions of a room similar in size of the design lab and resource room. Draw existing floor plan and ceiling plan. Also, measure and draw an existing interior elevation.  
W/H - Discuss overview of as-built drawings. Continue working on Project Four.
- Week 6  
Drafting Techniques / Project  
M/T - Continue working on Project Four  
W/H - Project Four is due.
- Week 7  
Drafting / Design Project: Space Planning, Bubble Diagrams  
M/T - Lecture on spatial relationships, i.e., bubble diagrams. Discuss client’s program statement and the methodology of Project Five. Community Center. Hand out program statement, and discuss the parameters.  
W/H - A brief overview of Monday/Tuesday lecture. Discuss commercial building codes. Continue working on Project Five.

- Week 8      Drafting Techniques: Project  
M/T - Continue working on Project Five.
- W/H - Overview of Auto-CAD software. Discuss Auto-CAD menu boards, password verification
- Week 9      Drafting / Design Project: Space Planning / Project Layout  
M/T - Project Five is due.
- W/H – Review Auto-CAD drawing commands.
- Week 10     Drafting / Design Project: Floor Plans  
M/T - Discuss the final project. Review program statement from handout, discussing the six drawing sheets in great detail. Designer option to complete final project by Auto-CAD, hand drawn or a combination.
- W/H - Discuss the drawing sheet number 2: Floor plan review during class, previous lecture notes on spatial relationships and bubble diagrams. Work on drawing sheet 2 – floor plan.
- Week 11     Drafting / Design Project: Elevations  
M/T - Work on floor plan. Drawing bubble diagrams for input by teacher.
- W/H - Work on floor plan – drawing sheet #2.
- Week 12     Drafting / Design: Reflected Ceiling Plan  
M/T - Lecture on reflected ceiling plans and the drawing process. Discuss lighting, supply and return symbols. Work on drawing sheet #3 reflected ceiling plan.
- W/H - Lecture on exterior elevations and the symbols used for drawing sheet #4.
- Week 13     Drafting / Design Project: Section Views  
M/T – Lecture on specification format and the 16 divisions. Discuss drawing sheet #5.
- W/H - Work on specification for the one room selected.
- Week 14     Drafting / Design Project: Interior Elevations  
M/T - Discuss interior elevations and related symbols. Discuss drawing sheet #6. Work on Drawing sheet #6.
- W/H - Continue to work on drawing sheet #6.
- Week 15     Drafting / Design Project: Finalize Project DUE  
M/T - Discuss title sheet and the related symbols. Work on drawing sheet #1.
- W/H - Summary of class lectures and evaluations.
- Week 16     Final Design Booklet Due: See Final Exam Schedule for Date and Time.  
Final examination – student to present final drawing booklet with all projects completed through the course.

- Projects will be evaluated each week to determine student progress.

- Assignments will not be accepted using tracing paper.
- Late design project will not be accepted. Students not need to retake the course to receive a passing grade.

# **ID 281: ARCHITECTURAL GRAPHICS**

## **Equipment and Materials**

\*Bold items are required for this class:

- Drafting Table (optional) Recommended Size 30"x42" or Larger
- Parallel Rule for Drafting Table (optional)
- T-square- Wood with Transparent Edge, Clear or Metal (36" min.) (Optional)
- Triangles**, 30-60 and 45 degree or Adjustable
- **Architect's Scale Ruler- Triangular or Flat-Beveled**
- Steel Measuring Ruler with Cork Bottom (24" min.) (Optional)
- Mechanical Pencil, .5 mm and .7 mm (One for each pencil lead.)**
- Mechanical Pencil Leads- 2B, H, 2H**
- Kneaded Eraser**
- Electric Eraser- optional
- Skum-X Erasing Powder-Bag or Container**
- Erasing Shield**
- Drafting Brush**
- Drafting Tape- ½" wide or drafting dots**
- Graduated Circle Template**
- 1/4" Plumbing Fixture Template (1/8" optional)
- Bow Compass Set with Ruling Pen or Technical Pen Attachment (Optional)
- Tracing/Trash Paper (Sketch Grade, Yellow or White-24" w. Roll - Optional)
- Drafting Vellum (Quality Grade, 100% rag preferred) - 11"x17"**
- Drawing/ cutting board: 30" x 40", Crescent #201 (smooth surface) (Optional)
- Container to carry supplies**
- Xacto Knife with #11 Blade (Optional)
- Extra Package of #11 Blades (Optional)
- Mat knife with extra blades (optional)

**Many of these items, not including papers, are available in a kit with carrying University & Maverick Bookstores.**