MT. SAN ANTONIO COLLEGE – AMENDED Minutes

Architecture, IDE, Manufacturing Department Meeting (approved 20140124) – Amended on 2/10/15
December 30, 2013, TIME: 10:15 a.m. – 12:30 pm, Bldg 28 Room 403A

Present: Max Lizarraga (Co-Chair), Ignacio Sardinas (Co chair), Steve James via conference call, Robert Ho via cell phone; Robert Perkins (on Sabbatical leave)

Robert Ho wanted to make it clear that he is “objecting to any further department meetings while we are not legally on campus”. Robert also further added that “his objection is not debatable”. I Sardinas was not clear on the issue of “legally on campus”.

Unanimous approval with modifications to the IDE 250 and IDE 270 courses as stated:

"Correction to error in the official course outline IDE 250 and 270. The units are correct but the lecture / lab breakdown is erroneous. IDE 250 should be 18 lecture hours 260 lab hours. IDE 270 should be 36 lecture hours 54 lab hours."

Robert Ho wanted to end the meeting at this point. In our discussion we expressed to Robert that we need to discuss several additional items.

We discussed the issue approved by the advisory committee to change the three unit load on Arch 10, 11, 13, 15, 21, 23, 27 and 29 to four units by providing 54 hours of lecture and 54 hours of lab time. Robert Ho had no objection to the change and added that we should include Arch 18 and 26.

We were disconnected at 10:39 am on the discussion over the unit increase from 29 to 36 units. Not sure whether Robert Ho got that information. So we called him back on the phone and left a phone message. Further option to offset the increase is to remove the four unit Art requirement from the Arch degree.

Additional items discussed include the following from the advisory meeting:

Architecture Program Needs and Revisions (advisory meeting 2013)

1. Courses need to be renumbered into 100 and 200 level numbers and names need to be adjusted to reflect current content.
2. Continue work with counseling and administration.
   a. Identify those students that choose to declare architecture as a major.
   b. Develop a simplified 4 semester course matrix with a brief explanation of why the suggested courses should be taken together.
   c. Reach an agreement with interested parties that requires the distribution of the department suggested course sequence.
3. Establish an architecture department orientation for any students enrolled in one of the entry level courses.
a. One method of creating this cohort based large scale meeting that would facilitate this type of orientation is to specify it as an on campus field trip in the CORs of ARCH 10,11,16.

b. Adopt department policy make it mandatory for all faculty teaching one of these courses to include it in their syllabus as a graded mandatory field trip the second week of class that would act as the orientation.

c. The trip could be run on a Saturday or a Sunday to lower the possibility of a conflict.

d. A test could also be a part of this orientation field trip.

e. Counseling should be invited to participate.

f. Distribute department simplified course matrix for all programs at this meeting

g. Explain the GPA issue and have the students work with the GPA calculator.

4. Develop an introduction to architecture and construction course similar to the MtSAC engineering department. Course would be a survey of the design and building industry professions. This request is a product of prior discussions with counseling and others on the campus. This course could be a General Education lecture hall type of course with a large amount of students. Course should include field trips to design schools, professional multidisciplinary offices and landmark projects. It should also present critical issues in the building and environmental fields. Course should meet once a week for several hours to accommodate the field trips. (note is this is not possible then see simplified implementation into arch11)

5. Continue to work with engineering department to incorporate a project based critical thinking course into our course offerings.

6. Research establishing learning community courses with Speech and English department focused on the need of architecture students.

7. Verify that field trips are listed in the COR description for any courses that may possibly need to take field trips. This requires consent of the advisory to modify the CORs.

8. Consistency in student learning outcomes and measurable objectives between different sections of the same course taught in the same semester.

   a. Modify the official outlines of record to tighten up the course measurable objectives as well as standardize the means of assessment.

   b. Develop specific SLOs and apply them to verify consistency.

9. Consistency in student learning outcomes and measurable objectives in the same course taught in different semesters by different faculty. (see suggested measures for member 7 above)

10. Modification of several of our entry level courses

   a. ARCH10 “Design I - Elements of design” would be renamed “Design I”
i. Integrate a design reading and comprehension component that would include entry level design literature and process for evaluating and understanding conceptual approaches, specialized references, design jargon etc. When possible reading should integrate with the design project the students are working on that week.

ii. Develop brief case studies and simple research related to the design project being undertaken. Integrate regular weekly visits to the library and incorporate the Information Literacy program into the course requirements.

iii. Course is currently undervalued in regards to unit value for the intensity of work required. Adjust hours in COR to 54 lecture 54 lab and adjust unit count from 3 to 4 based on item iii.

iv. The final project for this course has been a small retreat or residence. That project would be moved to design II.

v. The additional 5 weeks would be used to explore additional formal projects.

vi. Each of the formal projects produced during the semester would be given a simple programmatic use such as entry canopy, shade structure, observation tower/platform etc.

vii. A new synthesis component (final project) would require the student to place all of the objects into a park like setting incorporating the assigned simple uses in a logical, functional and visually satisfying fashion.

viii. Adjust maximum enrollment from 24 to 18 similar to Interior design program.

ix. Require a digital component utilizing 3 dimensional modeling.

b. ARCH16 “Basic CAD and Computer Applications” would become “Digital Media 1”

i. Additional emphasis would be placed on 3 dimensional modeling in addition to CAD based drawing

ii. Digital fabrication would be included at a basic level.

iii. Base content for course on shared projects with Arch10

c. ARCH11 “Architectural drawing” would become Design Communication and Culture

i. The content of this course would continue to include basic drawing and sketch based rapid visualization skills using the 3 dimensional objects directly related to the forms developed in the ARCH10 Design I course but available in premade form for students who are not taking arch10.

ii. Additional content would also include as an introduction to the profession of architecture, the study of current projects, issues, designers and trends. These topics would need to be standardized and covered in a similar fashion in all sections of the course. Standardized assessment methods would be used to assure compliance and consistency between classes.
iii. The Case Study process and its importance as a means of understanding precedence and a potential point of departure would be included as a component of the course.

iv. If we can’t create an intro GE course that includes field trips then incorporate cohort based field trips to design schools and professional offices

v. Increase from 3 to 4 units. (see note for Arch10 a-iii)

d. ARCH23 “Architectural Presentations” would become Digital media and Design communication

i. Set a hard prerequisite of Arch16 for this course

ii. Create a co-requisite with Arch21

iii. Adjust hours in COR to 54 lecture 54 lab

iv. Adjust unit count from 3 to 4 based on item iii

e. ARCH12

i. Incorporate a void in the paver.

ii. Incorporate the steel project with various methods of connecting metal (weld, bolt, screw, slot etc.). Also require the integration and attachment method of various materials to the steel. Examples could include glass to steel, wood to steel, plastics to steel, aluminum to steel etc.

iii. Consider the creation of a patterned block with a void(s) with could be set with glazing to allow diffuse light into a room or area.

11. Adoption of linked classes in lieu of establishing a ridged cohort, leaving the evening classes available for those wishing to take the courses in a slower fashion.

12. Possible establishment of study periods between the linked classes. For example, we could schedule a section of ARCH16 in the morning time slot (7:50-11:00) followed by an open period (12-3:10), after which the student would proceed to ARCH10 from 3:40-6:50. The student would be highly encouraged to not take another course during the open time slot and a teaching assistant would be available during that time slot to help students with their projects. Need to determine if attendance can be required.

13. Coordinated first semester curriculum

a. Currently we have 3 entry level courses we would like to coordinate.

i. ARCH10 Design 1-elements of design

ii. ARCH11 Architectural drawing

iii. ARCH16 Basic CAD and computer application
b. We would like to have the ARCH11 drawing and ARCH16 Computer courses use the subjects from the Design class rather than other objects or buildings as the means of learning the content of each course. We feel that all students could gain the intended basic knowledge and skills from those 2 respective courses as well as deepening the transfer track student understanding of the core design course and provide drawings to compliment the 3 dimensional formal work of the design class.

14. Coordinated second semester curriculum

a. Currently we have 3 second level courses we would like to coordinate.
   i. ARCH21 Design 2
   ii. ARCH23 Presentation and Digital Media
   iii. ARCH12 Methods and materials of construction

15. Revise Level - I architecture certificate (including the new unit counts as follows)
   i. ARCH10 4 units
   ii. ARCH11 4 units
   iii. ARCH16 4 units
   iv. MATH51 or higher 3 units
   v. ENGL68 or higher 4 units
   vi. Total units 19 units

16. Revise Level - II architecture certificate (including the new unit counts as follows)
   i. ARCH21 4 units
   ii. ARCH23 4 units
   iii. ARCH12 4 units
   iv. SPCH1A 4 units
   v. Total units 16 units

17. Articulation agreements

   a. Review status of articulation agreement with UC Berkeley. Keep in mid the requested change of an new ARCH course to match UC Berkeley’s ENV1 course.
b. Explore interest from CBU and NSAD in establishing an articulation agreement or in articulating specific courses.

18. Facilities and equipment needs
a. Field laboratory (previously requested)
b. Shop facilities (previously requested)
c. Portable welding equipment including spool gun and alternate gases
d. Composites shop and equipment
e. Inexpensive 3d printers

Construction Technology program revisions

1. Rename Program from “Construction Inspection” to a new more descriptive name.
   a. Possible names may include but are not limited to
      i. “Construction Technology”
      ii. “Construction Engineering Technology” (like CPP)
      iii. “Building and Construction Technology”
      iv. Engineering and Construction Technology (ECT)

   A discussion ensued and the department agrees to rename the Construction Inspection program to Engineering and Construction Technology (ECT) – Amended on 2/10/15

2. Include a Cal OSHA construction safety course as an entry level course to the program

3. Informal discussion with students reveal that some of the courses (legal aspects of construction, construction estimating, fundamentals of building inspection) may need to be taught by construction industry personnel.

4. Need construction industry representatives who would be willing to help guide and improve this program.

5. In order to articulate courses with CSU Construction programs (IE Cal Poly Pomona’s Construction Engineering Technology) we need to add a lab component to our current lecture only INSP courses. Professor Hovel Bavikian from CPP CET program offered last year to create an articulation
agreement with our program. We propose working with MtSAC’s articulation liaison and Professor Bavikian to determine what modifications would be required.

6. The technology track should have a vocational hands-on construction component in addition to the computer and practice based portions of the program. These courses could link the subject matter of what is represented in drawings and more abstract subjects with the more concrete processes of making a physical object like a foundation component, wall section, or roof assembly.

7. Need to have a scheduling component to the program. Could be tied to the estimating class. IE estimating and scheduling

8. Need to have course content in contractor side construction administration. IE preparation of submittals, substitutions, RFI, RFC, field logs, sub contract bid procedures etc.

**Landscape Architecture Certificates**

1. In recent years we have had several students accepted to the Landscape Architecture programs at both Cal Poly Pomona and SLO. In order to assist those students with planning we propose creating 2 new certificates, Landscape Architecture I and II, composed of a combination of architecture design courses and other articulated courses from Horticulture and Art. As we look at several of our design courses we need to consider creating alternate final projects based on the direction a student wants to head in. Meet again with LeeAnn Milburn and Renee Tang to get input on the certificates

   a. Level I
      i. ARCH10 4 units
      ii. ARCH11 4 units
      iii. ARCH16 4 units
      iv. ART15A 3 units
      v. AGOR1 3 units
      vi. Total units 18 units

   b. Level II
      i. ARCH12 4 units
      ii. ARCH21 4 units
iii. ARCH23 4 units
iv. SURV1A 3 units
v. AGOR13 3 units
vi. Total units 18 units