1. **Catalog Description**: Credit hours: 2; Sketching, descriptive geometry, computer graphics, computer aided design, and design projects.

2. **Pre-requisites and Co-requisites**: None

3. **Course Objectives**: The primary objective of the course is to educate students on the main concepts of computer aided design: solid modeling, assembly design, engineering drawing conventions, dimensioning and tolerance specification and descriptive geometry. In addition conceptual design skills such as creative thinking and idea illustration by sketching are taught.

4. **Contribution of course to meeting the professional component**: The course provides experience to work professionally in mechanical systems areas including the design and realization of such systems through a final project which provides the students an opportunity to develop the design of a mechanical device starting from the conceptual design all the way to detailed drawings with all dimensions and tolerances specified. The course content can be characterized as: 10% mathematics and 90% engineering design.

5. **Relationship of course to program outcomes**: The course addresses the following ABET program outcomes.
   (g) Communicate effectively: high coverage
   The course teaches graphical communication language that engineers practice. The outcome is assessed through assignments and projects requiring engineering drawings to be generated.
   (i) Recognize the need for, and engage in life long learning: medium coverage
   The course emphasize the need for life long learning by encouraging students to learn many aspects of CAD software and its user interface on their own since such engineering tools keep evolving. This program outcome is assessed through the final project.
   (j) Use the techniques, skills, and modern engineering tools necessary for engineering practice: high coverage
   The course teaches students free hand drawing skills, graphical techniques as well as use of modern CAD software. These skills as assessed through assignments, exams and the final project

6. **Instructor**: Gary K. Matthew, Associate Professor
   Office location: MAE-B, 328
   Telephone: 352-392-9473
   E-mail address: gmatthew@ufl.edu
   Web site [http://plaza.ufl.edu/hfs/eml2023](http://plaza.ufl.edu/hfs/eml2023)
   Office hours: To be determined

**Instructor**: Nam Ho Kim, Assistant Professor
   Office location: MAE-A, 210
   Telephone: 352-846-0665
   E-mail address: nkim@ufl.edu
   Web site [http://plaza.ufl.edu/hfs/eml2023](http://plaza.ufl.edu/hfs/eml2023)
   Office hours: To be determined

**Instructor**: Harold F. Snider, Visiting Associate Professor
   Office location: MAE-C, 126
   Telephone: 352-392-0817
   E-mail address: hfs@ufl.edu
   Web site [http://plaza.ufl.edu/hfs/eml2023](http://plaza.ufl.edu/hfs/eml2023)
   Office hours: To be determined
7. Teaching Assistants. A number of Graduate and undergraduate Teaching Assistants grade weekly assignments and assist students with Solid Modeling during evening study hours as listed below.

<table>
<thead>
<tr>
<th>TA</th>
<th>Hours</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>TA1</td>
<td>xx.xxxx (CAD001-CAD040)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
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<tr>
<td>TA2</td>
<td>xx.xxxx (CAD041-CAD080)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
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<tr>
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<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
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<tr>
<td>TA4</td>
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<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
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<tr>
<td>TA5</td>
<td>xx.xxxx (CAD161-CAD200)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
</tr>
<tr>
<td>TA6</td>
<td>xx.xxxx (CAD201-CAD240)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
</tr>
<tr>
<td>TA7</td>
<td>xx.xxxx (CAD241-CAD280)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
</tr>
<tr>
<td>TA8</td>
<td>xx.xxxx (CAD281-CAD320)</td>
<td><a href="mailto:xxx@ufl.edu">xxx@ufl.edu</a></td>
</tr>
</tbody>
</table>

TA Office Hours at MAE-C, Rm325
Tuesdays: 6:00-8:00 pm
Wednesdays: 6:00-10:00 pm
Thursdays: 2:00-4:00 pm, 6:00-10:00 pm

8. Meeting Times
section 3226: MWF 3rd period (9:35-10:25) and
section 3228: MWF 4th period (10:40-11:30)

10. Meeting Location: Weil Hall - Rm270

12. Textbooks and Software Required:
   c) “EML2023 Workbook ABC”; University Copy Center, 1620 W. University Ave.
   d) SOFTWARE: Pro/E (Wildfire) Student version 3.0.
      Available at: http://www.JourneyEd.com/


14. Course Outline: see Schedule. This schedule is available to the students in their assignment workbook. Any changes in the schedule are uploaded to the Eml2023 website.

15. Attendance and Expectations: Attendance is very important and you are responsible for knowledge of all scheduling and policy announcements in class. Assignments are due on Fridays at the beginning of class. Late assignments will receive 50% credit if submitted within one week and will not be graded thereafter.

16. Grading: Homework = 30%, Project = 20% and Exams = 50%


18. Make-up Exam Policy: Make up exams will be given for students with medical or other valid reasons for missing the exam.

19. Honesty Policy – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
20. Accommodation for Students with Disabilities – Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

21. UF Counseling Services – Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
   - University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
   - SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
   - Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
   - Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

22. Software Use – All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.