GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:
Copy and paste current course information from Class Search/Course Catalog.

College/School: Herberger Institute for Design and the Arts
Department/School: The Design School

Prefix: LAP  Number: 231  Title: Introductions to Digital Applications for Designers  Units: 3

Course description: Fundamentals of professional computer operation for designers including basic system usage, introduction of software packages focused on the design of sustainable environments, and utilizing computers to assist in environmental analysis and analytic decision making. Software packages include Microsoft Office, Adobe multimedia and creativity products, Esri ArcGIS geographic information systems (GIS), Autodesk AutoCAD computer aided design/drafting (CAD), and Trimble SketchUp 3D modeling software.

Is this a cross-listed course? No
If yes, please identify course(s): 

Is this a shared course? No
If so, list all academic units offering this course: 

Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of each department that offers the course is required for each designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.

Is this a permanent-numbered course with topics? No

If yes, each topic requires an individual submission, separate from other topics.

Requested designation: Mathematical Studies–CS  Mandatory Review: Yes

Note- a separate proposal is required for each designation.

Eligibility: Permanent numbered courses must have completed the university’s review and approval process. For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu.

Submission deadlines dates are as follow:
For Fall 2020 Effective Date: October 10, 2019  For Spring 2021 Effective Date: March 5, 2020

Area proposed course will serve:
A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study. It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines.

Checklists for general studies designations:
Complete and attach the appropriate checklist

- Literacy and Critical Inquiry core courses (L)
- Mathematics core courses (MA)
- Computer/statistics/quantitative applications core courses (CS)
- Humanities, Arts and Design core courses (HU)
- Social-Behavioral Sciences core courses (SB)
- Natural Sciences core courses (SQ/SG)
- Cultural Diversity in the United States courses (C)
- Global Awareness courses (G)
- Historical Awareness courses (H)

A complete proposal should include:
- Signed course proposal cover form
- Criteria checklist for General Studies designation being requested
- Course catalog description
- Sample syllabus for the course
- Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.

Contact information:
Name: Nikolas Smilovsky  E-mail: nikolas.smilovsky@asu.edu  Phone: 4808789824

Department Chair/Director approval: (Required)
Chair/Director name (Typed): Joseph Ewan  Date: 9/29/2020

Rev. 4/2019
Rationale and Objectives

The Mathematical Studies requirement is intended to ensure that students have skill in basic mathematics, can use mathematical analysis in their chosen fields, and can understand how computers can make mathematical analysis more powerful and efficient. The Mathematical Studies requirement is completed by satisfying both the Mathematics [MA] requirement and the Computer/Statistics/Quantitative Applications [CS] requirement explained below.

The Mathematics [MA] requirement, which ensures the acquisition of essential skill in basic mathematics, requires the student to complete a course in College Mathematics, College Algebra, or Pre-calculus; or demonstrate a higher level of skill by completing a mathematics course for which a course in the above three categories is a prerequisite.

The Computer/Statistics/Quantitative Applications [CS] requirement, which ensures skill in real world problem solving and analysis, requires the student to complete a course that uses some combination of computers, statistics, and/or mathematics.* Computer usage is encouraged but not required in statistics and quantitative applications courses. At a minimum, such courses should include multiple demonstrations of how computers can be used to perform the analyses more efficiently.

*CS does not stand for computer science in this context; the “S” stands for statistics. Courses in computer science must meet the criteria stated for CS courses.

Revised April 2014
Proposer: Please complete the following section and attach appropriate documentation.

### ASU--[CS] CRITERIA

**A COMPUTER/STATISTICS/QUANTITATIVE APPLICATIONS [CS] COURSE MUST SATISFY ONE OF THE FOLLOWING CRITERIA: 1, 2, OR 3**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Identify Documentation Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>1. Computer applications</strong>: courses must satisfy both a and b:</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>a. Course involves the use of computer programming languages or software programs for quantitative analysis, algorithmic design, modeling, simulation, animation, or statistics. Syllabus, Assignments, &amp; Projects</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>b. Course requires students to analyze and implement procedures that are applicable to at least one of the following problem domains <em>(check those applicable)</em>: Syllabus, Assignments, &amp; Projects</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>i. Spreadsheet analysis, systems analysis and design, and decision support systems. Syllabus, Assignments, &amp; Projects</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>ii. Graphic/artistic design using computers. Syllabus, Assignments, &amp; Projects</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>iii. Music design using computer software.</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>iv. Modeling, making extensive use of computer simulation. Syllabus, Assignments, &amp; Projects</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>v. Statistics studies stressing the use of computer software.</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>vi. Algorithmic design and computational thinking. Syllabus, Assignments, &amp; Projects</td>
</tr>
</tbody>
</table>

*The computer applications requirement cannot be satisfied by a course, the content of which is restricted primarily to word processing or report preparation skills, the study of the social impact of computers, or methodologies to select software packages for specific applications. Courses that emphasize the use of a computer software package are acceptable only if students are required to understand, at an appropriate level, the theoretical principles embodied in the operation of the software and are required to construct, test, and implement procedures that use the software to accomplish tasks in the applicable problem domains. Courses that involve the learning of a computer programming language are acceptable only if they also include a substantial introduction to applications to one of the listed problem domains.*
### 2. Statistical applications: courses must satisfy a, b, and c.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Identify Documentation Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Course has a minimum mathematical prerequisite of College Mathematics, College Algebra, or Pre-calculus, or a course already approved as satisfying the MA requirement.

b. The course must be focused principally on developing knowledge in statistical inference and include coverage of all of the following:

- [ ] i. Design of a statistical study.
- [ ] ii. Summarization and interpretation of data. Syllabus, Assignments, & Projects
- [ ] iii. Methods of sampling. Syllabus, Assignments, & Projects
- [ ] iv. Standard probability models. Syllabus, Assignments, & Projects
- [ ] v. Statistical estimation
- [ ] vi. Hypothesis testing.
- [ ] vii. Regression or correlation analysis.

c. The course must include multiple demonstrations of how computers can be used to perform statistical analysis more efficiently, if use of computers to carry out the analysis is not required. Syllabus, Assignments, & Projects
3. **Quantitative applications**: courses must satisfy **a**, **b**, and **c**.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Identify Documentation Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**a.** Course has a minimum mathematical prerequisite of College Mathematics, College Algebra, or Pre-calculus, or a course already approved as satisfying the MA requirement.

**b.** The course must be focused principally on the use of mathematical models in quantitative analysis and decision making. Examples of such models are:

   - i. Linear programming.
   - ii. Goal programming.
   - iii. Integer programming.
   - iv. Inventory models.
   - v. Decision theory. Syllabus, Assignments, & Projects
   - vi. Simulation and Monte Carlo methods.
   - vii. Other (explanation must be attached).

**c.** The course must include multiple demonstrations of how computers can be used to perform the above applications more efficiently, if use of computers is not required by students.
Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

<table>
<thead>
<tr>
<th>Criteria (from checksheet)</th>
<th>How course meets spirit (contextualize specific examples in next column)</th>
<th>Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a, 1bv, 1bvi</td>
<td>This entire class is focused on the use of software applications to solve real world, quantitative and qualitative, environmental problems. The software and the data used help investigate, quantify, analyze, design, model, and share computation results. The students are taught fundamental lessons on how to use data appropriately for research and decision making.</td>
<td>All assignments in this class are relative to this criteria. Literally the purpose of the class is to teach students how to use different computer software to solve issues, analyze data, and present digital outputs. Lectures focus on achieving this aim.</td>
</tr>
<tr>
<td>1bi, 1biv, 1bvi</td>
<td>Students in this class utilize Geographic Information Systems (GIS) data that inherently has tabular data nested in it. Students learn how to query, analyze, and design data around spreadsheet dynamics. Additionally, students will produce reports from the data that will contain charts and graphs produced from MS Excel or Google Sheets. Data are manipulated further in these spreadsheets.</td>
<td>All homeworks relate to these criteria. All projects relate to this criteria. All lectures relate to this criteria. All in-class lab work relates to this criteria.</td>
</tr>
<tr>
<td>1bii, 1biv</td>
<td>As a environmental design class, students are taught how to digitally design graphics in Adobe Illustrator, InDesign, and Photoshop. Further students use AutoCAD, GIS, and SketchUp to create more complicated maps, diagrams, and 3D models to convew artistic and quantitative results.</td>
<td>All homeworks relate to these criteria. All projects relate to this criteria. All lectures relate to this criteria. All in-class lab work relates to this criteria.</td>
</tr>
<tr>
<td>Ibii, Ivb</td>
<td>Students use AutoCAD, Sketch Up, and Esri GIS to model/present data. Modelling takes several forms in this class. Modeling is conceptual and research based. Students use models to represent both data and design, both two dimensionally and three dimensionally.</td>
<td>A lot of homeworks relate to these criteria. The drafting project, 3D modeling project, and GIS project relate to this criteria. A lot of lectures relate to this criteria. A lot of in-class lab work relates to this criteria.</td>
</tr>
</tbody>
</table>
LAP231 Introduction to Digital Applications for Designers

Faculty Name: Dr. Nikolas Smilovsky, PhD, GISP
Office Location: Design South #125
Email: Nikolas.smilovsky@asu.edu
Office Hours: Scheduled via Zoom only during Fall 2020
Class: Wednesdays 08/20 – 12/4, 11:50am -12:40pm (Canvas/Zoom)
Lab 1 (88681): 1:00pm until 2:15pm (Canvas/Zoom/CDN263)
Lab 1 (88682): 2:30pm until 3:45pm (Canvas/Zoom/CDN263)

Course Description:
Fundamentals of professional computer operation for designers including basic system usage, introduction of software packages focused on the design of sustainable environments, and utilizing computers to assist in environmental analysis and analytic decision making. Software packages include Microsoft Office, Adobe multimedia and creativity products, Esri ArcGIS geographic information systems (GIS), Autodesk AutoCAD computer aided design/drafting (CAD), and Trimble SketchUp 3D modeling software.

Enrollment Requirements:
Prerequisite(s): Landscape Architecture BS major; Corequisite(s): LDE 261 OR non-Landscape Architecture major with sophomore standing OR Visiting University Student

Course Objectives:
The instructor’s main objective of this class is to introduce the students to a plethora of software computer systems used for landscape architecture and other related fields. Before learning any specific software packages, the class starts with a fundamental review of computers and common operating systems. From this foundation the class teaches students the basic operation of Adobe’s suite of design and photo editing software (InDesign, Photoshop, Illustrator), Autodesk’s computer aided design (CAD) software, Trimble’s 3D modeling software (Sketchup), and Esri’s geographic information systems (GIS). Operational practice throughout the class will include applying these software packages to “real-world” landscape architectural and environmental design needs.

Student Learning Outcomes:
Student learn how to use Microsoft’s Windows in a professional environment.
Students learn how to manipulate images and photos for design projects using Photoshop.
Students learn how to create posters and other larger formatted marketing deliverables using InDesign.
Students learn how to manipulate multilayered documents using Illustrator.
Students learn how to operate and draft basic objects in CAD.
Students learn how to create realistic 3D models using SketchUp.
Students are introduced to GIS and how it can analyze both natural and built environments.

Assignments:
Homework – 20% (200 points out of 1000 total class points)
Students will receive weekly homework assignments. There are 10 mandatory homework assignments throughout the course. Homework consists of readings, videos, lab assignments, research projects, and personal reflection essays. Homework grades are reduced by 25% for
everyday it is late. The max score for each assignment is 20 points. For example - a homework assignment turned in 1 day late will have a max score of 15.

Attendance – 20% (200 points out of 1000 total class points)

Due to the complexity and speed of information being passed to the students, attendance is mandatory. Attendance will be taken weekly at lecture and labs. Throughout the semester two unsanctioned absences are allowed. If the student misses additional classes, they will automatically lose points towards their class attendance grade. Attendance in this class is worth 20% of your final grade or 200 points. Each absence, more than two, will result in a 10% reduction from those 200 points. For example - on the student’s third absence, their total possible attendance score is 180 points. No exceptions will be made for students. Due to COVID-19, if you have any issues attending class please inform the instructor immediately. Lectures are recorded for later replay.

Design Project – 15% (150 points out of 1000 total class points)

Students utilize Adobe products to create a marketing exhibit/diagrams involving landscape architecture and how it impacts our world. Students submit presentation exhibits/diagrams and a corresponding white-paper on how they created their project. Projects are submitted through Canvas.

Drafting Project – 15% (150 points out of 1000 total class points)

Using AutoCAD students will draft a landscape site design from a high resolution ortho-image. The site design will be from a location in Phoenix, Arizona. Students submit final designs as .dwg files through Canvas. A corresponding reflection on how they created their project will also be submitted.

3D Modeling Project – 15% (150 points out of 1000 total class points)

Using their imagination and an existing location on campus, students will design a potential 3D landscape. 3D renderings will be appropriate scaled and as realistic as possible. A marketing poster containing the 3D design will be submitted through Canvas with a corresponding white-paper. Student may use projects they are working for on for other classes for this 3D model if it makes sense. Projects must be approved.

GIS Project – 15% (150 points out of 1000 total class points)

Students will complete a basic GIS project with the help of the instructor. This project is assigned with a comprehensive walk-through document. Completion of the project will be a topographic relief map, submitted via Canvas.

Required Primary and Secondary Materials (e.g., readings, videos, podcasts, films and studio supplies)

There are no required textbooks for this class. The instructor will supply all readings/videos in class. See homework in section VI for more information.

In place of a textbook, students are required to purchase a 1tb external hard drive for the storage of materials created in class. Exact hard drive specifications will be reviewed in class. Hard
drives are required to be brought to every class and must be shown to the instructor. A 1tb Seagate external hard drive can be purchased on Amazon for $44.99.

If students are not using the lab provided on campus, they are required to have all pertinent software installed on their own computers. It is up to the student to work with HIDA IT to get these software packages installed. All computers in the Design North lab have these software installed.

**Course Itinerary (tentative schedule):**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
<th>Homework Due Date</th>
<th>Project Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20th</td>
<td>ASU classes begin</td>
<td>Semester start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 26th</td>
<td>Drop/Add</td>
<td>Deadline for semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 26th</td>
<td>Introduction, Syllabus, &amp; Basic Computer Operation</td>
<td>First day of class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 2nd</td>
<td>Fee deadline</td>
<td>Tuition and fees 100% refund deadline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 2nd</td>
<td>Adobe #1</td>
<td>What is Adobe Illustrator?</td>
<td>Assignment #1</td>
<td></td>
</tr>
<tr>
<td>September 7th</td>
<td>Labor Day</td>
<td>No class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 9th</td>
<td>Adobe #2</td>
<td>What is Adobe InDesign?</td>
<td>Assignment #2</td>
<td></td>
</tr>
<tr>
<td>September 16th</td>
<td>Adobe #3</td>
<td>What is Adobe Photoshop?</td>
<td>Assignment #3</td>
<td></td>
</tr>
<tr>
<td>September 23rd</td>
<td>Adobe #3</td>
<td>What is Adobe Photoshop? (self-learning)</td>
<td>Assignment #4</td>
<td></td>
</tr>
<tr>
<td>September 30th</td>
<td>Adobe #4</td>
<td>Adobe Recap</td>
<td></td>
<td>Design Project</td>
</tr>
<tr>
<td>October 7th</td>
<td>CAD #1</td>
<td>Intro to CAD</td>
<td>Assignment #5</td>
<td></td>
</tr>
<tr>
<td>October 14th</td>
<td>CAD #2</td>
<td>More on CAD</td>
<td>Assignment #6</td>
<td></td>
</tr>
<tr>
<td>October 21st</td>
<td>CAD #3</td>
<td>Maximizing CAD Design</td>
<td>Assignment #7</td>
<td></td>
</tr>
<tr>
<td>October 28th</td>
<td>Lab day</td>
<td>Work on projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 4th</td>
<td>SketchUp #1</td>
<td>What is SketchUp?</td>
<td>Assignment #8</td>
<td>CAD Project</td>
</tr>
<tr>
<td>November 11th</td>
<td>Veterans Day</td>
<td>No class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 18th</td>
<td>SketchUp #2</td>
<td>Maximizing SketchUp</td>
<td>Assignment #9</td>
<td></td>
</tr>
<tr>
<td>November 25th</td>
<td>GIS #1</td>
<td>What is GIS?</td>
<td>Assignment #10</td>
<td>3D Modeling Project</td>
</tr>
<tr>
<td>November 28th</td>
<td>Thanksgiving</td>
<td>No class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 29th</td>
<td>Thanksgiving</td>
<td>No class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 2nd</td>
<td>GIS #2</td>
<td>Why is GIS so Powerful?</td>
<td></td>
<td>GIS Project</td>
</tr>
<tr>
<td>December 4th</td>
<td>Last day of class</td>
<td>Semester end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 9th – 16th</td>
<td>Grades Due</td>
<td>Final grades due</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grading, including grade scale**

Grades will be assigned to students, according to the following scales and performance characterizations. “A” grades indicate superior performance, significantly exceeds expectations, and requirements. “B” grades indicate very good performance and meets professional expectations of competent performance. “C” grades indicate good performance and meets minimally acceptable professional performance standards. “D” grades indicate poor, marginal, and not professionally acceptable. “E” grades indicate unacceptable or irresponsible performance. Any fractional grade a student earns at the end of the semester will be rounded up to the nearest whole number.
Class breakdown:
Attendance - 200 points
Homework - 200 points
Design Project - 150 points
Drafting Project - 150 points
3D Modeling Project - 150 points
GIS Project - 150 points
Total 1000 points

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>98-100</td>
</tr>
<tr>
<td>A</td>
<td>93-97</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>B+</td>
<td>88-89</td>
</tr>
<tr>
<td>B</td>
<td>83-87</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>78-79</td>
</tr>
<tr>
<td>C</td>
<td>70-77</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>E</td>
<td>0-59</td>
</tr>
</tbody>
</table>

Attendance Policy:
Please see attendance assignment above for additional details.

Excused absences related to religious observances/practices in accord with ACD 304–04, “Accommodation for Religious Practices.” Students may be excused for the observance of religious holidays. Students should notify the instructor at the beginning of the semester about the need to be absent from class due to religious observances. Students will be responsible for materials covered during their absence and should consult with the instructor to arrange reasonable accommodation for missed exams or other required assignments.

Excused absences related to university sanctioned activities in accord with ACD 304–02, “Missed Classes Due to University-Sanctioned Activities.” Students required to miss classes due to university sanctioned activities will not be counted absent. However, absence from class or examinations due to university-sanctioned activities does not relieve students from responsibility for any part of the course work required during the period of the absence. Students should inform the instructor early in the semester of upcoming scheduled absences and immediately upon learning of unscheduled required class absences. Reasonable accommodation to make up missed exams or other required assignments will be made. Consult the instructor BEFORE the absence to arrange for this accommodation.

Line-of-duty absence and missed assignment policy:
A student who is a member of the National Guard, Reserve, or other U.S. Armed Forces branch who misses classes, assignments or examinations due to line-of-duty responsibilities, shall have the opportunity to make up the coursework in accordance with SSM 20-18 Accommodating Active Duty Military Personnel. This accommodation also applies to spouses who are the guardian of minor children during line-of-duty activities. This policy does not excuse students from course responsibilities during their absence. Students should first notify the Pat Tillman Veterans Center of their activation and then the instructor to discuss options.

Academic Integrity and Student Honor Code:
Besides academic performance, students should exhibit the qualities of honesty and integrity. Every student is expected to produce his/her original, independent work. Any student whose work indicates a violation of the ASU Academic Misconduct Policy including cheating, plagiarism, and
dishonesty will be subject to disciplinary action. Plagiarism is defined as deliberately passing off someone else’s words or ideas as your own. All necessary and appropriate sanctions will be issued to all parties involved with plagiarizing any course work. Plagiarism and any other form of academic dishonesty that is in violation with the Student Code of Conduct will not be tolerated. Arizona State University and the Herberger Institute for Design and the Arts expect the highest standards of academic integrity from all students. Failure to meet these standards may result in suspension or expulsion from the university or other sanctions as specified in the ASU Student Academic Integrity Policy (http://provost.asu.edu/academicintegrity), “[e]ach student must act with honesty and integrity, and must respect the rights of others in carrying out all academic assignments.” This policy also defines academic dishonesty and sets a process for faculty members and colleges to sanction dishonesty. Violations of this policy fall into five broad areas that include but are not limited to:

- Cheating on an academic evaluation or assignments
- Plagiarizing
- Academic deceit, such as fabricating data or information
- Aiding Academic Integrity Policy violations and inappropriately collaborating
- Falsifying academic records

I sanction any incidents of academic dishonesty in my courses using University and HIDA guidelines. Should you have any question about whether or not something falls subject to this clause, feel free to contact me or review the university policy on academic integrity at the above link. Per ASU policy, a student may not avoid the consequences of academic dishonesty by withdrawing from a course, and may be placed back in the course in order to face sanctions resulting from academic integrity violations. You are responsible for abiding by this policy.

**Copyright:**

Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement. A statement that the course content, including lectures and other handouts, is copyrighted material. Students may not share outside the class, upload, sell, or distribute course content or notes taken during the conduct of the course (see ACD 304–06, “Commercial Note Taking Services” for more information). THIS CONTENT IS PROTECTED AND MAY NOT BE SHARED, UPLOADED, SOLD, OR DISTRIBUTED.

**Student Conduct:**

ASU adheres to a university-wide Student Code of Conduct. The philosophy behind this policy states: The aim of education is the intellectual, personal, social, and ethical development of the individual. The educational process is ideally conducted in an environment that encourages reasoned discourse, intellectual honesty, openness to constructive change and respect for the rights of all individuals. Self-discipline and a respect for the rights of others in the university community are necessary for the fulfillment of such goals. The Student Code of Conduct is designed to promote this environment at each of the state universities. You are expected to treat your instructor and your fellow classmates with respect and kindness. In all correspondence and in Discussion Board postings, you should show respect for the viewpoints of others who may disagree with you or see things from a different perspective. Criticizing, ridiculing, insulting, or belittling others will not be accepted. Keep in mind that electronic communications do not have the advantage of nonverbal cues that are so much a part of interpersonal communication. Humor or satire can sometimes be misinterpreted in strictly electronic communication forums.

**Threatening or disruptive behavior:**

Self-discipline and a respect for the rights of others in the classroom or studio and university
community are necessary for a conducive learning and teaching environment. Threatening or violent behavior will result in the administrative withdrawal of the student from the class. Disruptive behavior may result in the removal of the student from the class. Threatening, violent, or disruptive behavior will not be tolerated in this class, and will be handled in accordance with ASU policy (SSM 104-02). For more information please visit: https://eoss.asu.edu/dos/srr/PoliciesAndProcedures and https://eoss.asu.edu/dos/safety/ThreateningBehavior.

**Classroom Behavior (Technology Usage):**

It is encouraged that you bring technology (cell phones, tablets and laptops) to class to help you take notes and do research, however please turn off cell phone ringers and do not use your phone to make personal calls in class or use any technology to use social media in class. Do not answer your phone in class. If you believe you are receiving an emergency call, please step outside to take it.

**Withdrawal:**

If you are unable to complete the course, it is your responsibility to arrange for withdrawal from the class. You will not be automatically withdrawn and unless you are officially withdrawn from the course you will receive a final grade based upon the total points you have earned for the semester. Students are required to pay all tuition and fees for any registered course unless enrollment is officially cancelled during the 100% refund period. Please visit the Academic Calendar to review the withdrawal deadlines for this semester. For more information on Drop/Add and Withdraw visit: https://students.asu.edu/drop-add

**Special Accommodations:**

Your instructor is willing to make any reasonable adaptations for limitations due to any disability documented with the DRC, including learning disabilities. Please contact the instructor during office hours or by appointment to discuss any special needs you may have. You must contact the Disability Resource Center to process the paperwork for special course accommodations. To request academic accommodations due to a disability, please contact the ASU Disability Resource Center (http://www.asu.edu/studentaffairs/ed/drc/# ; Phone: (480) 965-1234; TDD: (480) 965-9000). This is a very important step as accommodations may be difficult to make retroactively. If you have a letter from their office indicating that you have a disability which requires academic accommodations, in order to assure that you receive your accommodations in a timely manner, please present this documentation to me as soon as possible so that your needs can be addressed effectively.

**Disability Support Services:**

Students with disabilities must have an equally effective and equivalent educational opportunity as those students without disabilities. Students experiencing difficulty accessing course materials because of a disability are expected to contact the course instructor so that a solution can be found that provides all students equal access to course materials and technology. Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to me at the beginning of the semester either during office hours or by appointment. It may be difficult to make accommodations retroactively. **Note:** Prior to receiving disability accommodations, verification of eligibility from the Disability Resource Center (DRC) is required. Disability information is confidential.

**Information for Students with Disabilities:**

Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. Students should contact the Disability Resource Center on the campus that your class is being held. Campus-specific location and contact information can be found on the DRC website. DRC offices are
open 8 a.m. to 5 p.m. Monday – Friday. Check the DRC website for eligibility and documentation policies (https://eoss.asu.edu/drc)

**Policy on Sexual Discrimination:**
Policy on sexual discrimination as described in ACD 401, "Prohibition Against Discrimination, Harassment, and Retaliation", including the fact that the instructor is a mandated reporter and therefore obligated to report any information regarding alleged acts of sexual discrimination. Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information. As an employee of ASU, I am a mandated reporter and obligated to report instances of reported or suspected incidences of sexual harassment.

**Student Rights and Responsibilities:**
Students must abide by all the requirements stated in this syllabus. In addition, all students should be aware of their Rights and Responsibilities at Arizona State University and abide by the ASU Student Honor Code.

**Student Services & Resources:**
You will find a list of student resources at: https://eoss.asu.edu/resources
Resources included are advisement, registration, financial aid, disability services, counseling, tutoring, library, and more.

**Non-emergency Student of Concern process:**
If you are concerned for a fellow student’s well-being, please review the information and complete the form at: https://herbergerinstitute.asu.edu/resources/new-students/student-of-concern-process
FOR EMERGENCIES CALL 911. (Be prepared with the physical address of the location.)

**Academic Calendar and Important Dates:**
The academic calendar can be found here: https://students.asu.edu/academic-calendar

**Subject to change:**
The Instructor reserves the right to change portions of this syllabus (assignments, deadlines etc.) by verbal instructions during scheduled class time. The student is responsible for noting changes and acting accordingly. Grading and absence policies are not subject to change.

**Computer, Internet, and Electronic Communications Policy:**
http://www.asu.edu/aad/manuals/acd/acd125.html
LAP231 Intro to Applications for Designers
Assignment #1 – Who are you and what are your career aspirations?
Max Points: 20
Assigned: 8/26/20
Due: 9/2/20

Task:

1. Please write a 1-page minimum narrative of who you are and what your future career aspirations are. This brief essay is to be written at a collegiate level. Please make sure to run spell check, use Times New Roman font size 12, used double spaces, and cite any references you may use in your response. Feel free to include images, but they do not count towards the page total.

2. Be sure to answer the following questions about yourself. If you do not know the answer and are unsure, try your best to answer it.
   a. What is your name?
   b. Where are you from?
   c. What made you want to be a Landscape Architect / Environmental Designer? Or do you want to do something else, perhaps related to design?
   d. What are your future career interests and aspirations?
   e. Have you heard of or used any of the software packages described in the syllabus? Explain.
   f. How familiar are you with the Window’s operating system? Please explain any relevant experience you may have.
   g. What is one thing you want to learn about computers during this class?
   h. Tell me one interesting/funny thing about yourself.

3. The estimated time of completion for this assignment is one hour.

4. Save and name your assignment “LastName_Assignment1.doc” Export your assignment doc into a PDF. You must submit a correctly named PDF for full credit.

5. Upload your PDF assignment to Canvas before class on 9/2/20. Class starts at 11:50am MST. If you submit your assignment at 11:51am it is late.
Intro to Applications for Designers

Homework Assignment #2 – ASU Design Major Marketing Flyer

Max Points: 20
Assigned: 9/2/20
Due: 9/9/20

Task:

1. Using Adobe Illustrator CS, the skills learned in class, and from using the internet as a backup resource - create a marketing flyer depicting why students should consider a design major at Arizona State University. Be sure to be artistic, fun, and comprehensive.

2. Flyer size is 8.5 x 11 inches.

3. The flyer needs to include images of campus, images of landscape architecture, environmental design, and other related catchy graphics. The goal is to draw people’s attention to the flyer and have them consider ASU for their future school education. Graphics may be downloaded off the internet for this assignment. No citations necessary. You may also use custom graphics.

4. Include some verbiage explaining the great things about ASU and the Design School. If you can’t think of any, do a Google search or simply walk around the department.

5. Include ASU styles and symbols, making the flyer distinctly “sun devilish.”

6. Once you have your marketing flyer completed save the artwork as a PDF. Name the PDF “YourLastName_Assignment2.pdf”. Submit this PDF for your assignment through Canvas. Submit the assignment through Canvas by the beginning of class on 9/9/20.

7. The assignment will take roughly 3 hours to complete. Students are not permitted to work together on this assignment.

8. The goal of this project is not to make the most beautiful marketing flyer ever conceived, rather it is to show that students are able to use Illustrator to create digital graphics.

9. Practice makes perfect. Don’t be discouraged if this feels overwhelming, this is just the first of many opportunities to sharpen your graphic design skills.
Intro to Computer Modeling

Assignment #3 – Creating an Architectural Presentation Board with InDesign

Max Points: 20

Assigned: 9/9/20

Due: 9/16/20

Task:

1. Watch these two instructional videos:
   a. Video #1: https://www.youtube.com/watch?v=g-lm_rP79C4
   b. Video #2: https://www.youtube.com/watch?v=dqC5RBYW1HE

2. Using Adobe InDesign and the skills learned so far create a hypothetical, architectural presentation board. The presentation board must be created using a large format size, like described in the videos. Students may use discretion when picking the exact poster sizes to use.

3. The presentation board needs to include graphics, shapes, text, and other artwork that depicts architectural designs. All images can be downloaded from the internet. The architecture depicted in the board does not need to be real or based on anything real.

4. Include verbiage depicting and defining what architecture is and why it’s important. You may use the internet to find words, quotes, and other text. Please do not leave generic “placement text” generated from the software. You need to use real architectural language.

5. Create your own branding for the poster board.

6. Once you have your presentation board completed save the artwork as a PDF. Name the PDF your “LastName_Assignment3.pdf” Submit this PDF for your assignment through Canvas. Do not submit an InDesign file (.indd).

7. The assignment will take roughly 3 hours to complete. Students are not permitted to work together on this assignment.

8. The assignment is to be submitted through Canvas by the beginning of class on 9/16/20.

9. The goal of this project is not to make the most beautiful presentation board on architecture ever, rather it is to show that students are able to use InDesign to create digital graphics. Practice makes perfect. Don’t be discouraged yet, this is just the second of many opportunities to sharpen your design skills.
Intro to Computer Modeling

Assignment #4 – Reworking Images in Photoshop

Max Points: 20

Assigned: 9/16/20

Due: 9/23/20

Task:

1. Finish watching the video from lab: https://www.youtube.com/watch?v=yqKHo1Q7OMc

2. Using Adobe Photoshop and the skills learned so far in class create an enhanced/edited image. The image needs to be originally downloaded from the internet or scanned from a photograph. The original image needs to be high resolution! The resolution needs to be better than 1200x1200. Please try and find the highest quality image as possible. Suggested file formats are .jpeg or .png.

3. The image needs to depict a landscape setting. The landscape can be built or natural. It can be as small as a local park or as vast as the Grand Canyon.

4. Once you have the image downloaded, import it into Adobe Photoshop. Using any tools you want, enhance and edit your image. This can be done through lighting, depth, adding or deleting objects, adding text, restyling, or a plethora of other ways.

5. Include ASU styles and symbols, making the flyer distinctly “sun devilish.”

6. Once you have your enhanced image completed, save/export the artwork as a PDF. Name the PDF “LastName_Assignment”. Submit this PDF and the original image for your assignment through Canvas. Name the original image “LastName_Original”.

7. The assignment will take roughly 2 hours to complete. Students are not permitted to work together on this assignment.

8. The assignment is due via Canvas by the beginning of class on 9/23.

9. The goal of this project is not to make the most beautiful image ever, rather it is to show that you are able to use Photoshop to enhance digital graphics. Practice makes perfect. Don’t be discouraged yet, this is just the third of many opportunities to sharpen your digital design skills.
Intro to Computer Modeling

Assignment #6 – Creating a Block Repository

Max Points: 20

Assigned: 10/16/19

Due: 10/23/19

Task:

1. Using the internet find a website(s) that has free AutoCAD blocks that you can download. Download >50 unique CAD blocks. If you download blocks from different website, make sure to get all of the unique shapes into a single dwg file. Be sure to organize the file appropriately. You want this file to be extremely easy to use for future projects. Name this dwg file YourLastName_CAD_Blocks_Repository.dwg.

2. After creating your CAD blocks repository create a new dwg file. Name this new file YourLasName_BlockDesign.dwg. Using the blocks, you just downloaded, create a new unique design. The design specifics are up to you. Some ideas are creating a landscape plan, building design, room floorplan, or any other kind of design-build plan. In this dwg please use your own drafting as well as the blocks. The blocks are to be incorporated into what you draw. Make sure to complete the drawing in model space.

3. After you have completed the design drawing, take a screenshot of the design (SnippingTool). Try and center the screenshot as best as possible. Name the screenshot YourLastName_BlockDesign.dwg.

4. Through Canvas submit your CAD_Blocks_Repository.dwg and the screenshot of your BlockDesign file. Do not submit any other files.

5. The assignment will take roughly 1-2 hours to complete. Students are not permitted to work together on this assignment.

6. The assignment is to be submitted through Canvas by the beginning of class on 10/23/19.
Intro to Computer Modeling

Assignment #7 – Creating a Basic Site Plan

Max Points: 20

Assigned: 10/23/19

Due: 10/30/19

Task:

1. Using the ASU campus DWG downloaded in lab and the base file we setup together, create a small landscape site plan. Pick an area in your base dwg and design a 50ft x 50ft landscape.

2. The client has asked you to add greenspace to the area. Incorporate pants, trees, bushes, planters, turf, and other “green” assets to beautify the selected area. This design plan is 100% up to you. Use any blocks you have collected to help enhance your site plan.

3. Once you create the landscape plan, be sure to update the layout space title block. Add any items you used in the landscape plan. Remember people looking at your plan need to be told what they are looking at.

4. After the title block is updated, take a screen shot of your layout space. Make sure to include the entire plan. Name this screen shot your LastName_BasicSitePlan.jpeg.

5. Name the file your LastName_BasicSitePlan.jpeg. Do not submit any other files.

6. The assignment will take roughly 1 hours to complete. Students are not permitted to work together on this assignment.

7. The assignment is to be submitted through Canvas by the beginning of class on 10/30/19.
Intro to Computer Modeling

Assignment #8 – Design Something!

Max Points: 20

Assigned: 10/30/19

Due: 11/6/19

Task:

This is an open homework assignment. The assignment’s only requirement is that you submit a CAD design of something originally created by you. Anything you can dream up as a design will work. For example; houses, landscapes, or starships. Pick something fun!

The design needs to be detailed. Expect to spend 1-3 hours doing the design.

The design must have a layout and title block.

Export the design to a PDF.

Name the file “LastName_FreeDesign.pdf.

That’s it! Don’t over think it.
Intro to Computer Modeling

Assignment #9 – Modeling a House & Yard in SketchUp

Max Points: 20

Assigned: 11/6/19

Due: 11/13/19

Task:

1. Using what you have learned in class about SketchUp and what you can find on the internet, please create a model of a house and adjoining yard. The house and adjoining yard are considered a single-dwelling unit. Do not model a corporate or industrial looking facility.

2. The house and yard need to be created with a realistic scale. Houses are normally 1000sqft to 5000sqft, with yards ranging from 5000sqft to 15,000sqft. The house resides inside of the yard.

3. The design of the house and yard are 100% up to you. Be as fun or practical as you wish. Please create enough detail that people looking at the model can tell what they are looking at. However, do not spend hours upon hours working on the model’s details. This is not the project for that.

4. Be sure to include doors, paths, windows, trees, yard furniture, bushes, pools, outside sitting areas, and any other things you can think of that would be found on someone’s private property.

5. You may use the 3D warehouse to download pre-made objects to fit into your model. However, you must create your own objects too.

6. As you create your model, you need to document the processing. For this assignment you need to take 3 screenshots of your model. The first screenshot needs to be taken at the beginning of the process, showing the start of the model. The second screenshot needs to show the design at 50% completion. The final screenshot needs to be the completed model. Make a single pdf file with all the screenshots and name it pdf “LastName_Assignment9.pdf”. Submit it via Canvas before class next week.

7. The assignment will take roughly 1-2 hours to complete. Students are not permitted to work together on this assignment.
Intro to Computer Modeling

Assignment #10 – Geographic Information Systems (GIS) Site Location Map

Max Points: 20

Assigned: 11/20/19

Due: 11/27/19 (by 11:59pm)

Task:

• Using Esri’s ArcGIS Pro software, create a location map of ASU Tempe Campus.
• The map must be centered on ASU Tempe Campus, with a proper scale.
• The map must either show an aerial basemap or streets basemap.
• Include a layer for local roads (either from ASU or from Esri). Symbolize the roads to your liking, keeping in mind viewer visibility/legibility.
• Include an additional layer of your choice (either from ASU or from Esri). Symbolize this layer accordingly, keep in mind viewer visibility/legibility.
• Include all standard cartographic elements including a title, north arrow, scale bar, legend, and citation/map credits.
• Include labels for important buildings, landmarks, roads, and other municipality boundaries.
• Make the map as professional as you can with your limited GIS experience.
• Export the map as a PDF and name it “LastName_SiteMap.PDF”. Submit the PDF via Canvas by the end of the day (11:59pm).
Intro to Applications for Designers

The Design Project: The Impacts of Landscape Architecture - Past, Present, & Future

Max Points: 150
Assigned: 9/2/20
Due: 10/7/20

Task:

1. Using all the Adobe products reviewed in class and during lab, each student will create a final presentation board about the past, present, and future of landscape architecture and environmental design. The board must to incorporate historical elements, it needs to depict current trends in the industry, and should project a vision of the ecologic design profession into the future.

2. The presentation board is 24 x 36 inches.

3. The presentation board is to be visual catchy and draw people’s attention. Sell your idea of landscape architecture and environmental design through the presented narrative on the board.

4. Include Arizona State University branding, but this is not the focus of the presentation board. Instead focus on telling a story of landscape architecture and environmental design. Connect ASU with this narrative.

5. Feel free to use images created in class and in lab for previous assignments. You are also allowed to download images from the internet for your presentation boards, just be sure to customize these images so they become distinctly yours.

6. Make sure your name and the class’s information is visually displayed on the board.

7. Once you have your presentation board completed, save the artwork as a PDF. Name the project file “YourLastName_DesignProject.pdf”. Submit this PDF for your assignment through Canvas. The assignment is due by the beginning of class on 10/7/20.

8. The assignment will take roughly 6-9 hours to complete. Students are not permitted to work together on this assignment.
Intro to Computer Modeling

Drafting Project – Digitizing Encanto Park

Max Points: 150

Assigned: 10/9/19

Due: 11/6/19

Task:

1. Download aerial images of Encanto Park from the Maricopa County Assessor’s website.

2. Download all record files pertaining to Encanto Park from the assessor’s website.

3. Import the aerial image(s) you downloaded into an AutoCAD dwg. Make sure to import the image into model space. Name the dwg “YourLastName_DraftingProject.dwg.”

4. Make sure to understand and set the scale of your image(s) in the drawing.

5. Once the image is set, create appropriate layers for all items that will be digitized from the park. You will need to create layers for: trees, bushes, water, turf, golf course area, roads, buildings, concrete, and sidewalks. If you want to create additional layers and digitize additional assets for greater detail, please feel free!

6. Digitize all assets from Encanto Park. Make sure you know the true property boundary of the project.

7. Create an “overview” layout space, with a viewport centered on the park. The layout page needs to be 11x17 landscape. Create a title block with these items: name, class, date, project name, description of Encanto Park, north arrow, scale bar, and a legend. For the park description you are required to write it yourself. Do not use a description from the internet. Using the record files, images, and any other internet sources write your own personal description of the park. The description needs to be 5 sentences long.

8. Once you have your dwg completed, export the map to a PDF. Name the PDF “YourLastName_DraftingProject.pdf.” Now that you have the survey record files of the park from the assessors, a digitized PDF of the park, and the working DWG you need to compress the files (zipping). Zip the files, naming the new zipped file your last name, underscore, DraftingProject. Submit the zip file through Blackboard. Do not submit individual files. Points will be reduced if your file naming is incorrect. You will also loose points if you do not submit the files the way it is described in this document.
9. The assignment will take roughly 6-9 hours to complete. Students are not permitted to work together on this assignment.

10. The assignment is to be submitted through Canvas by the beginning of class on 11/6/19.
Intro to Computer Modeling

3D Modeling Project – Conceptual Park Designs for ASU Common Areas

Max Points: 150

Assigned: 11/6

Due: 11/20

Task:

- Using SketchUp create a conceptual park design that is intended to be integrated at ASU.

- The park needs to be created for common areas and needs to be at a minimum 100ft wide by 100ft long. Remember you are designing the park for an urban-desert environment. Make sure to incorporate desert plants into your design.

- Once you have created your design take three screen shots of the park from different angles and views. Save these screenshots as individual jpegs. Using those screenshots and the Adobe software, create a 1-page flyer displaying your conceptual park.

- Include verbiage and details about the park. Make it as visual stimulating as possible. Be sure to include your name, date, the project, and class.

- Save a PDF of your conceptual park flier. Name it “LastName_3DModeling.pdf”.

- Submit through Canvas before class on 11/20
Intro to Computer Modeling
GIS Project – Grand Canyon Elevation Mapping
Max Points: 150
Assigned: 12/4/19
Due: 12/4/19 by 11:59pm

Task (will do it together on the last day of class):

1. Create an appropriate GIS Folder Structure on your external hard drive to store your GIS files that you download, manipulate, and share.
2. Download the project GIS data from Canvas / GIS Project Content. It is a zip file. Store it in your downloaded/raw data folder. Unzip the data into your GIS folder for manipulation.
3. Open Esri ArcGIS Pro and create a new document called “LastName_GISProject”
4. Import all downloaded layers into the map document.
5. Set layer order, Park boundary 1st, roads 2nd, water 3rd, elevation 4th, and hillshade 5th.
6. Set data view bookmark, zoom into the Grand Canyon boundary. Students can select a specific area of the Grand Canyon if they prefer.
7. Set specific layer symbology:
   a. Unique color for the Grand Canyon, only display canyon boundaries
   b. Unique color for roads, turn on road name labels
   c. Unique color for streams (water), turn on water name labels
   d. Set stratigraphic layers for elevation raster to 10 manual classes, select color ramp, rename labels, set appropriate transparency
   e. Review hillside pixel resolution and elevation, make black and white if it is not
8. Setup layout view, set layout view bookmark, put Canyon at the top or bottom of the page.
9. Add all standard cartographic elements to layout view including:
   a. North arrow
   b. Map title, name it “Grand Canyon Elevation Map”
   c. Scale bar (don’t forget to set it as an easy even number)
   d. Legend (must include all included layers provided)
   e. Map credits (who made the map and when)
10. Setup/adjust page elements to your liking, this includes colors and symbology, each person’s map will look different.
11. Export map to PDF, set PDF to 300 dpi, name pdf “LastName_Map.pdf”.
12. After completing your map, write up a half-page summary of how you created this map.
   Include specific steps and some of the tools GIS provides its users. Explain how GIS can quickly make an informative map and why it’s important for designers of the future.
   Combine this summary with your map and submit a single PDF named “LastName_GISProject.pdf.”
13. Submit PDF through Canvas by midnight on 12/4.
Example Map:

Grand Canyon Elevation Map

Legend
- 20 - 1,087  Grand Canyon
- 1,087 - 1,995  Roads
- 1,995 - 2,982  Rivers
- 2,982 - 3,970
- 3,970 - 4,958

0  12.5  25  50 Miles