

AEROSPACE DESIGN 1
EAS4700-11718 Section 0075

Class Periods: MON Periods 9-10 (4:05 – 6:00 pm) **Location:** NZH 0112
WED Period 9 (4:05 – 4:55 pm) **Location:** TUR 2319
Academic Term: Fall 2024

Instructor:

Mr. Michael Generale

mgenerale@ufl.edu

Campus Phone Number: 352-294-1183

Office Hours: Mondays and Wednesdays 1:00 – 3:00 PM, MAE-C 125, Other times and virtual meetings by appointment.

Teaching Assistants:

Please contact them through the Canvas website

- Tao Dobbins: taodobbins@ufl.edu Office Hours and location TBD
- Joseph Hill: joseph.hill@ufl.edu Office Hours and location TBD
- Allen Martinez: allenmartinez@ufl.edu Office Hours and location TBD

Course Description

Applications of the principles of analysis and design to aerospace vehicles. Emphasizes astronautics. 3 credit hours.

Course Pre-Requisites / Co-Requisites

EAS4510 Astrodynamics and EML4312 Control of Mechanical Engineering Systems with at least a D grade. PER THE MAE DEPARTMENT, THIS WILL BE STRICTLY ENFORCED, NO MATTER IF YOU HAVE BEEN ABLE TO REGISTER FOR THE CLASS.

Working knowledge of MATLAB, Simulink, STK, and a CAD program, such as Solidworks or Autodesk Fusion, is required. Students will have to learn tools as they go.

Course Objectives

By the end of this course, you should be able to do the following:

1. Prepare technical documents in the aerospace industry.
2. Give technical presentations and develop communication skills.
3. Work in a team and lead a team.
4. Seek, find, and assimilate the knowledge you need to solve new problems.

Materials and Supply Fees

N/A

Relation to Program Outcomes (ABET):

As of 07 AUG 2024

Outcome	Coverage*
1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	High
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	High - Assessed
3. An ability to communicate effectively with a range of audiences	High- Assessed

4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	High - Assessed
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	High - Assessed
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	Medium
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	Medium

*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not covered or assessed in the course.

Aerospace Engineering UF Student Learning Outcomes:

Outcome	Coverage*
1. Apply knowledge of mathematics, science, and engineering principles to aerospace engineering problems (ABET Outcome (1))	High
2. Design and conduct aerospace engineering experiments and analyze and interpret the data (ABET Outcome (6))	High
3. Design an aerospace engineering system, component or process to meet desired needs within realistic economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability constraints (ABET Outcome (2))	High - Assessed
4. Communicate technical data and design information effectively in speech and in writing to other aerospace engineers (ABET Outcome (3))	High

Required Textbooks, Software, and Hardware

Required Textbooks

- **Elements of Spacecraft Design by Charles D. Brown** (available free online from UF Library)
ISBN (print): 978-1-56347-524-5
eISBN: 978-1-60086-179-6
Publication Date: January 1, 2002
- **CubeSat 101 NASA reference guide for designing, building, and planning a CubeSat mission**
https://www.nasa.gov/sites/default/files/atoms/files/nasa_csli_cubesat_101_508.pdf
- **System Engineering Handbook NASA reference guide for Systems Engineering.**
<https://www.nasa.gov/seh/index.html>

Required Software

You must have access to the following software:

- MATLAB.
- Any CAD program.
 - You may use whatever CAD program you are most comfortable with. However, you will be 3D printing a model of your project, so Fusion 360 is *recommended*.
- Prusa Slicer.
 - Your models will be made using the class's Prusa Mk4 3D printers. Prusa Slicer is guaranteed to be compatible. It is available free online.
- Microsoft Project (available for download from UF).

- MS Project is a scheduling program. While other software apps do similar things, MS Project has been an industry standard for years.
- Satellite Tool Kit (STK) installed on individual machines, with running license.
 - STK is a tool for simulating orbital mechanics on your computer. It is an industry standard for simulating spaceflight and vehicle performance.
 - NOTE: Free Flyer by a.i. solutions is an acceptable alternative, but you will have limited in class technical support with it. .

STK LICENSE INSTRUCTIONS:

1. Go to the “STK UPLOAD FILES” folder in the class CANVAS site.
2. Open the “AGISTKInstallation.pdf” file and follow the instructions.
3. If you have any issues loading or running STK, first try the UF IT Help Desk. If that doesn’t answer your issue, contact either Professor Generale or a Learning Assistant.

Required Hardware

To transfer your G-codes to the Prusa Mk4 printers, you must have a USB flash drive (USB Type A; if you only have USB-C, you will need an adapter).

Recommended Materials

- **Space Mission Engineering: The New SMAD by Wertz, Evertt & Puschell**
Publication Date 2011, 2nd printing 2015
- **Human Spaceflight Mission Analysis and Design 2nd edition by Larson, McQuade & Pranke**
Publication Date 2014

NOTE: Although I made these ***optional*** for this course, I strongly recommend them (especially Human Spaceflight Mission Analysis and Design). These are relatively expensive texts. However, the wealth of knowledge they contain will serve you well in your Aerospace career, whether you enter human or robotic spaceflight.

Required Computer

UF student computing requirement: <https://news.it.ufl.edu/education/student-computing-requirements-for-uf/>

MAE student computing requirement: <https://mae.ufl.edu/students/undergraduate/computer-requirements/>

NOTE: It is MAE’s position that a Windows computer is desired as software packages like *SolidWorks* require Windows to run properly. Macs running a virtual Windows machine have been known to have difficulties running Windows-based engineering software. Please follow the MAE computer requirements link above for details. Also, MAE IT does not support Mac computers.

Course Schedule

Week / Dates	Topic	Notes
<p>1 26/28 AUG 24</p>	<p align="center"><u>Monday</u></p> <p><u>Module 1</u></p> <ol style="list-style-type: none"> Course, project, and instructor introduction. Project Overview Starting your Design: What is a CubeSat? Group assignments Introduction to Project Management principles <hr/> <p align="center"><u>Wednesday</u></p> <p><u>Module 2</u></p> <ol style="list-style-type: none"> Operations Concept / CONOPS development Requirements Definition Assessing Risk Problem Analysis-Decision Analysis 	<p>Reading reference: Elements of Spacecraft Design (ESD) Ch. 2 Systems Engineering</p> <p>CubeSats 101</p> <p>Systems Engineering Handbook (SEH) 3.0 NASA Program/Project Life Cycle SEH 4.0 System Design Process SEH 6.2 Requirements Management SEH 6.4 Risk Management SEH 6.8 Decision Analysis</p> <p><i>Human Spaceflight Mission Analysis and Design (HSMAD) *</i> <i>Ch. 1 An Introduction to Human Spaceflight</i> <i>Ch.2 Designing Human Space Missions</i></p> <p><i>Space Mission Engineering (New SMAD) *</i> <i>Ch. 1.1 What is Space Mission Engineering?</i> <i>Ch.3 Space Mission Engineering</i></p> <p align="center">*Optional Texts</p>
<p>2 02 SEP 24 - No Class - 04 SEP 24</p>	<p align="center"><u>Wednesday</u></p> <p><u>Module 2</u></p> <ol style="list-style-type: none"> Schedules and Open Item Tracking Spacecraft Docking <p><u>Module 3</u></p> <ol style="list-style-type: none"> Designing the Propulsion System and Selecting Elements 	<p>Reading reference:</p> <p>ESD Ch. 3 Orbital Mechanics ESD Ch. 5 Attitude Control ESD Ch. 4 Propulsion ESD Ch. 6 Power Systems</p> <p><i>HSMAD* Ch. 24 Propulsion Systems</i></p> <p><i>NEW SMAD* Ch. 18 Spacecraft Subsystems I- Propulsion</i></p> <p align="center">*Optional Texts</p>
<p>3 09/11 SEP 24</p>	<p align="center"><u>Monday</u></p> <ol style="list-style-type: none"> Astrodynamics Review Guidance, Navigation, Attitude Control Technology Readiness Level Electrical Power-Schematic - Wiring Diagram -Cable Routing Diagram Power Management system design Budgeting <hr/> <p align="center"><u>Wednesday</u></p> <p><u>Module 4</u></p>	<p>Reading reference: ESD Ch. 7 Thermal Control ESD Ch. 10 Structures</p> <p><u>Work to complete for 9/16:</u></p> <ul style="list-style-type: none"> <u>Initial design / mission concepts</u> Including: <u>Potential Launch Vehicles</u> <u>Docking system(s) being considered</u> <u>Initial trajectory concept</u>

	<p>19. Communications and data systems</p> <p>20. Thermal Control Methods</p> <p>21. Vibro-acoustics</p> <p>22. Structural design considerations</p>	
<p>4 16 / 18 SEP 24</p>	<ul style="list-style-type: none"> Project Review <u>MECH III/SCD tag-up loc TBD</u> <p>23. Effective Presentations</p> <p>24. Designing an Effective Test Plan</p>	<p><u>Work to complete for 9/23:</u></p> <ul style="list-style-type: none"> <u>Draft ADCS concept</u> <u>Draft Propulsion system design</u> <u>Draft Power Budget</u> <u>Draft Thermal Control Plan</u> <u>Spacecraft design updates</u>
<p>5 23 / 25 SEP 24</p>	<p style="text-align: center;">Monday</p> <ul style="list-style-type: none"> Project Review <hr/> <p style="text-align: center;">Wednesday</p> <ul style="list-style-type: none"> Project Review Part 2 	<p><u>Work to complete for 9/30:</u></p> <ul style="list-style-type: none"> <u>Draft Schedule</u> <u>Current OISR</u> <u>Draft Test Plan</u> <u>Spacecraft design updates</u> <p style="text-align: center;">ALL SDR PRESENTATIONS MUST BE UPLOADED TO CANVAS NO LATER THAN: 11 PM 27 SEP 2024 - NO EXCEPTIONS -</p>
<p>6 30 SEP/ 02 OCT 24</p>	<p style="text-align: center;">Monday SDR Presentations: Groups 1,2,3,4</p> <hr/> <p style="text-align: center;">Wednesday SDR Presentations: Groups 5,6,7,8</p>	<p>Each team will be given the 30 MINUTES to make their presentations. Presentation time will be limited to allow all groups to present within the limitations of the scheduled class periods.</p> <p style="text-align: center;">ALL MID-TERM PEER REVIEWS MUST BE UPLOADED TO CANVAS NO LATER THAN: 11 PM 04 OCT 2024 - NO EXCEPTIONS -</p>
<p>7 07 / 09 OCT 24</p>	<p style="text-align: center;">Monday Post SDR Debriefs: Groups ALL</p> <hr/> <p style="text-align: center;">Wednesday Post SDR Debriefs: Groups ALL</p>	
<p>8 14 / 16 OCT 24</p>	<p>Project/design reviews & group work time</p>	
<p>9 21 / 23 OCT 24</p>	<p>Project/design reviews & group work time</p>	
<p>10 28 / 30 OCT 24</p>	<p>Project/design reviews & group work time</p>	

11 04 / 06 NOV 24	Project/design reviews & group work time	ALL PDR PRESENTATIONS MUST BE UPLOADED TO CANVAS NO LATER THAN: 11 PM 08 NOV 2024 - NO EXCEPTIONS -
12 11 / 13 NOV 24	Monday PDR Presentations: Groups 8,7,6,5 <hr/> Wednesday PDR Presentations: Groups 4,3,2,1	3D printed models of your current designs are due at the time of your presentation.
13 18 - 20 NOV 24	Monday PDR Debriefs <hr/> Wednesday <u>Final Report Review</u>	Reviewing the scoring of PDR presentations focusing on areas for improvement. ALL FINAL PEER REVIEWS MUST BE UPLOADED TO CANVAS NO LATER THAN: 11 PM 22 NOV 2024 - NO EXCEPTIONS -
14 24 - 29 NOV 24	THANKSGIVING BREAK	
15 02-04 DEC 24	Monday Final Report Review <hr/> Wednesday FINAL REPORTS DUE	ALL FINAL REPORTS MUST BE UPLOADED TO CANVAS NO LATER THAN: 11 PM 04 DEC 2024 - NO EXCEPTIONS -
16 07 – 13 DEC 24	FINALS WEEK	
17 16 DEC 24	GRADES DUE	

Important Dates

- Week 05: 27 SEP 2024 11:00 PM SDR packages must be uploaded.
- Week 06: 04 OCT 2024 11:00 PM Midterm Peer Reviews must be uploaded.
- Week 11: 08 NOV 2024 11:00 PM PDR presentations must be uploaded.
- Week 12: 11 & 13 NOV 2024 3D printed models must be handed out with PDR presentation.
- Week 13: 04 DEC 2024 11:00 PM Final reports must be uploaded

Attendance Policy, Class Expectations, and Make-Up Policy

This course is highly participative and group work-intensive. Therefore, students are expected to attend all meetings.

Requirements for class attendance, assignments, and other work in this course are consistent with university policies found at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

Attendance in class will be recorded. Students who provide a **minimum of 24 hours** of notice with an acceptable reason for their absence will be granted an excused absence. Notice may be provided to the instructor and TA team in the form of an email or MS Teams message. Acceptable excuses are those outlined on the University attendance policy website. Last-minute absences due to medical issues may be excused with a note from your doctor.

Additionally, there will be no early or late presentations. If you can't be present for your team presentation, notify the instructor per the guidelines for an excused absence above and make arrangements for a teammate to cover your section. The absent student is responsible for adequately preparing the teammate to cover for them. Alternatively, a pre-recorded or virtual presentation may be allowed with at least two weeks of advanced notification of an excused absence.

Please make every attempt to arrange any travel according to the presentation dates specified in the syllabus. If the dates for your travel are beyond your control (as in the case of UF marching band members, for example), notify the instructor and your teammates as soon as possible. Unexcused absences for a presentation will result in a letter grade reduction in your grade for the assignment.

A bonus will be awarded for attendance. The attendance bonus will be prorated for the student's actual attendance as follows:

- 95% – 100% attendance; 30 points
- 91% – 94% attendance: 20 points
- 85% – 90% attendance: 10 points
- 84% or less attendance: 0 points

Any student who “ghosts” or cuts off all communication with this course (stops attending lectures, stops working with their group, stops communicating with the instructor and TA team, and does not complete assigned work) will be provided a grade only for work they have completed. A grade of 0 (zero) will be given for all missing work. Example: If only 30% of the work has been completed, the maximum possible grade will be 30% or E.

The students remain entirely responsible for timely communication with the instructor and TA team.

Evaluation of Grades

This course introduces all elements of the spacecraft design process. Students are organized into design teams and associated with different subsystems and tasks to develop a solution to a space vehicle system's problem of practical interest, drawing on their backgrounds in aerospace engineering science, machine design, and manufacturing methods.

Skills exercised include:

- Problem definition and requirement analysis
- Meeting design specifications
- Concept development
- Reliability analysis
- Evaluation of alternative solutions
- Materials considerations
- Engineering prototyping
- Mission analysis
- Costs and schedule analysis
- Presentation skills

This course is communication-intensive and writing-intensive. You are expected to meet with your groups and work on your project extensively outside class periods.

Grading will be determined as follows.

Assignment	Time Frame	Type	Poss. Points	%
System Design Review (SDR)	Mid October	Group	1340	15
Preliminary Design Review (PDR)	Late November	Group	1610	15
Final Design Report (FDR)	Finals	Group	1590	20
90 Second Design Video "Commercial"	Late November	Group	40	05
3D printed Model	Finals	Group	35	10
Peer Evaluation	Mid-Term/Finals	Individual	40	05
Individual SDR Grade	Mid-Term	Individual	Varies	15
Individual PDR Grade	Finals	Individual	Varies	15
			TOTAL	100
Attendance Bonus	Finals	Individual	30	3
GatorEval Bonus	Finals	Class	1	3

System Design Review (SDR) Group Grade: SDRs will be held during the week of **30 SEP 2024**. Each group will present its work to the instructor and customer. SDRs are worth 15% of your grade and serve as your midterm exam. All teammates are expected to participate in the presentation.

Preliminary Design Review (PDR) Group Grade: PDR will be held on the week of **14 NOV 2024**. Each group will present their work to the instructor and customer. **PDR is worth 15% of your grade** and serves as your final exam. All teammates are expected to participate in the presentation.

90 Second Design Video "Commercial": If it is held, you will be participating in the Mechanical Engineering Design Showcase at the end of the semester (specific dates to be announced). Your group performance in the Poster session and 90-second video is **worth 5% of your grade**. This grade is based on judging your group project as defined by the rubric for the Design Showcase. Additionally, you will have the opportunity to share your résumé with engineering companies participating in the judging of the Design Showcase, such as Northrup-Grumman. Design showcase is an opportunity for you to demonstrate your skills and get face time with potential employers. All teammates are expected to participate in the presentation and video.

You will also have the opportunity to submit your résumé to the guest evaluators. This is optional, and no points are awarded. It is simply an opportunity for you to market yourself.

Final Design Report (FDR) Group Grade: The final report on your group design is due NO LATER THAN **04 DEC 2024**. The FDR goes into greater detail than is possible in the limited time of the PDR and CDR and is your opportunity to address shortcomings identified in your CDR presentation. **The final report is worth 20% of your grade.** A suitable report format may be found on the class CANVAS website. **LATE SUBMISSION WILL RESULT IN THE LOSS OF ONE LETTER GRADE.**

3D printed Model Group Grade: A scale model of the most current version of your satellite that demonstrates any unique features of your design (deployable solar panels, antennae, etc.) is **due NO LATER THAN the day of your PDR presentation**. It should illustrate how your design integrates with the docking module of your MECH III partner's design and how your two satellites can dock together. The Mech III class will provide a model of their design at the same scale as your spacecraft to demonstrate that you have mastered communicating critical interface features between your designs.

You must print at least one set of models that demonstrate your design. You may print an additional model if it helps tell your story (i.e., a smaller-scale model of the overall design and one larger-scale model of a unique feature). **NOTE:** additional models will not guarantee a better grade. The goal is for your 3D print or prints to tell the story of your design.

Models of large items such as an entire 12U CubeSat should be printed so the main structure fits within the print bed volume of the class's Prusa Mk4 printers (i.e., no more than 210 mm wide x 210 mm deep x 250 mm tall or ~8.25" wide x 8.25" deep x 10" tall). Your models should be between 2:3 and 3:4 scale.

Smaller items (articulating mechanisms, etc.) may be printed at a scale to provide sufficient design detail (i.e., 1:1 or larger if necessary). *The goal is to provide a model that is easily handled and may be easily passed from one person to another.* **Your printed model is worth 10% of your grade.** Late submission will result in a loss of one letter grade for this assignment.

Individual Work Grade: Your individual performance in the PDR and CDR are **each worth 15% of your grade**. This grade is based on your individual performance in your primary area of responsibility for the group project as defined by the rubric for the project.

Peer evaluation grade: A peer evaluation of each member of your group is due at mid-term **04 OCT 2024 and a final 22 NOV 2024, and each is worth 5% of your grade**. This is a semester-long updateable grade (everyone is given a chance to improve their performance till the end). A standardized form will be used for this evaluation. This is important because your team must function well together for your team to be successful. Periodic feedback on all team member's performance is the only way to keep the group functioning well. **LATE SUBMISSION WILL RESULT IN THE SUBMITTER GETTING A 5% REDUCTION TO THE EVALUATION SCORE. NO SUBMISSION WILL RESULT IN A 25% REDUCTION TO THE EVALUATION SCORE.**

GatorEval Survey Bonus: A voluntary course and instructor evaluation in GatorEvals is requested and is valued as a **3% bonus *if a minimum of 75% of the class participates***. Students are expected to provide honest, professional, and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens and can complete assessments through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>.

Guidance on how to give feedback professionally and respectfully is available at

<https://gatorevals.aa.ufl.edu/students/> . Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/> .

Attendance Bonus: A **3% individual bonus** will be awarded to anyone with **90% or better attendance**. Credit for attendance is given for being in class on time for the duration of the class period. Because there are sometimes unavoidable circumstances, excused absences will count as being present. To have an excused absence for things like interviews or attending the job fair, you must notify Professor Generale AND the TA responsible for grading a **MINIMUM OF 24 HOURS IN ADVANCE OF YOUR ABSENCE**. Any medical issue notification 24 – 8 hours prior to class will be accepted on a case-by-case basis (hangovers don't count).

The course CANVAS website provides the rubric for evaluation of the mid-term and final presentations and the final report.

Grading Policy

Percent	Grade	Grade Points
95 to 100	A	4.00
90 to 94.99	A-	3.67
87 to 89.99	B+	3.33
84 to 86.99	B	3.00
80 to 83.99	B-	2.67
77 to 79.99	C+	2.33
74 to 76.99	C	2.00
70 to 73.99	C-	1.67
67 to 69.99	D+	1.33
64 to 66.99	D	1.00
60 to 63.99	D-	0.67
Less Than 59.99	E	0.00

More information on UF grading policy may be found at:
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course.

A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://sccr.dso.ufl.edu/process/student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values varied perspectives and lived experiences within our community and is committed to supporting the University’s core values, including the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information, and veteran status.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Undergraduate Coordinator
- HWCOE Human Resources, 352-392-0904, student-support-hr@eng.ufl.edu
- Pam Dickrell, Associate Dean of Student Affairs, 352-392-2177, pld@ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

Software Use

All faculty, staff, and students 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.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://registrar.ufl.edu/ferpa.html>

Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: <https://counseling.ufl.edu>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the **Office of Title IX Compliance**, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
<https://elearning.ufl.edu/>.

Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling;
<https://career.ufl.edu>.

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
<https://teachingcenter.ufl.edu/>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
<https://writing.ufl.edu/writing-studio/>.

Student Complaints Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>; <https://care.dso.ufl.edu>.

On-Line Students Complaints: <https://distance.ufl.edu/getting-help/>; <https://distance.ufl.edu/state-authorization-status/#student-complaint>.