**Feb 13 Update: see lecture schedule highlighted text**

**FLORIDA GULF COAST UNIVERSITY**

COLLEGE of ARTS and SCIENCES

Department of Chemistry and Physics

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| --- | --- |
| **Lecture Instructor: Derrick E. Boucher** | **Phone Number: (239) 590-7170** |
| **Semester: SPRING 2019** | **e-mail: dboucher@fgcu.edu** |
| **Office Hours: M 1pm-4pm**  **W,F 12:30 pm – 1:15 pm** | **Office Location: WH 255** |
| **There is only one lecture time slot but two lab time slots (each a different CRN) that will be coordinated for content (share the same schedules) under Dr. Boucher:** | |
| **Class Meetings: MWF 10:30am – 11:45am (CRNs 12596, 12597)**  **Lab Meetings:**  **W 7:30am – 9:10am, BHG 267 (12596) Lab Instructor: Niles Kin** [**nkin@fgcu.edu**](mailto:nkin@fgcu.edu)  **F 7:30am – 9:10am, BHG 267 (12597) Lab Instructor: Niles Kin** | |

1. **COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS, CRN:**

**PHY 2048C GENERAL PHYSICS I WITH LAB (4 CREDITS) CRN 12596/12597**

Students study the nature of the physical world. Principles of classical mechanics, introduction to wave theory, heat and elementary thermodynamics are investigated. The curriculum is inquiry based and fully integrated with laboratory and/or field experiences which emphasize active learning strategies.

1. **PREREQUISITES FOR THIS COURSE:**

MAC 1147 for level UG with min. grade of C or MAC 2311 for level UG with min. grade of C

1. **GENERAL COURSE INFORMATION:**  Topic Outline.

* Systems of measurement, units, and dimensional analysis
* Motion in one, two, and three dimensions
* Newton’s Laws and their applications
* Work, energy, and conservation of energy
* Systems of particles, collisions, center of mass, and conservation of linear momentum
* Rotational motion and centripetal acceleration
* Conservation of angular momentum
* Gravity
* Static and rotational equilibrium, elasticity
* Fluids, Archimedes’ principle
* Oscillations and waves
* Temperature and the kinetic theory of gases
* Heat and thermodynamics

1. **LEARNING OUTCOMES AND ASSESSMENT:**

**GENERAL EDUCATION COMPETENCIES:**

General education courses must meet all of the following outcomes.

*Quantitative Reasoning (QR):* Analyze, summarize, and interpret quantitative data. Make valid inferences.

*Written Communication (WC):* To communicate effectively using standard English language.

*Critical Thinking (CT):* To demonstrate skills necessary for analysis, synthesis, and evaluation.

**ADDITIONAL COURSE COMPETENCIES:**

At the conclusion of this course, students will be able to demonstrate the following additional competencies:

* Examine the principle of dimensional analysis and use it to derive approximate expressions of physical laws.
* Identify the SI system of units and analyze the differences between base and derived units.
* Interpret the laws of motion and apply them to solve problems in one and two dimensions.
* Differentiate between and among the concepts of work, power, energy, and conservation of energy; examine the applications of these concepts, and use them to interpret and explain natural phenomena.
* Recognize the concept of center of mass and use it to analyze the motion of a system of particles.
* Describe the concept of conservation of momentum, examine its applications, and use it to interpret and explain natural phenomena.
* Apply the concepts of momentum and energy to explain collisions.
* Describe the concept of circular motion and use it to solve problems.
* Use the laws of rotational kinematics to compare linear motion with rotational motion.
* Explain the law of gravitation as it relates to natural phenomena; combine this law with the laws of motion to explain planetary orbits.
* Analyze the conditions for static and rotational equilibrium and use the concept of torque to explain natural phenomena.
* Describe the concepts related to fluid pressure and buoyancy.
* Explain the properties of oscillations, waves and the Doppler effect; apply these concepts to natural phenomena.
* Use the kinetic theory of gases to distinguish between “heat” and “temperature”; interpret and apply the concept of energy per degree of freedom.
* Interpret and apply the laws of thermodynamics to explain natural phenomena.
* Recognize thermal properties and processes and use them to explain and interpret thermal phenomena.

1. **COLLEGE-WIDE POLICIES:**

**Academic Behavior Standards and Academic Dishonesty**

 All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found under the "Student Code of Conduct" and under "Policies and Procedures" of the Student Guidebook . All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at <http://studentservices.fgcu.edu/StudentConduct/guidebook.html>.

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism.  All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers.  Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site. **Any misbehaviors and or misconducts will be promptly reported to the Dean of Students.**

**My policy for cheating on exams (copying from others or using materials not allowed) is FAILURE FOR THE COURSE.** For other assignments, a report will be made to the Dean of Students and the student will receive a zero grade for that assignment.

**Disability Accommodations Services**

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university’s guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please contact the Office of Adaptive Services <http://www.fgcu.edu/adaptive/>.

The Office of Adaptive Services is located in the Wellness Building. The phone number is 590-7956 or TTY 590-7930, e-mail [adaptive@fgcu.edu](mailto:adaptive@fgcu.edu). I am very willing to accommodate any requests, but I require that any requests be made at least a week in advance so that I can properly prepare the accommodation.

**Student Observance of Religious Holidays**

 All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs.  Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

1. **REQUIREMENTS FOR THE STUDENTS:**

**Computers:** Computers, tablets and smart phones are allowed in lecture or laboratory as long as their use is restricted to course-related activities. In case of violation, you will be warned and maybe asked to leave. A report will be sent to the Dean of Students office.

**Mobile Phones:** You must silence your mobile phones before coming to the class. No talk and no text are allowed during the class. In case of violation, you will be asked to leave. A report will be sent to the Dean of Students office. If you must take an important call, set your phone to a silent mode and quietly leave the classroom to answer the call or text.

**Reading the Textbook:**

During the lecture part of our class meetings we will discuss the main concepts covered in your course textbook. It is very important that you read the assigned chapters in the textbook **before** you come to the class. Please, do not expect me to just read the textbook for you! The course textbook is a good one, written by physics professors who know their physics *and* teaching physics. Only by actually doing reading and any assignments I give will you be prepared to learn during the next class. If you do not prepare, you will be lost and frustrated during class.

**Laboratory**:

The laboratory is an integral part of this class. Failure to complete and hand in all laboratory assignments will result in an automatic **F** for the course. The laboratory will contribute 20% to your final grade, and **you must pass the laboratory to pass the class!** Do not be late for the lab sessions. You must be present for a lab session to write up a lab report for that session; you can’t merely use someone else’s data to write a report for a lab you did not do. You must hand in **lab report** on time. **Hand-written Lab Reports will not be accepted (except for equations or diagrams)!** If you hand in your Lab Report late, there will be an automatic **deduction of 10 points** (out of a maximum of 100 points) for every day (including weekends). Do not miss any lab sessions. You can make up only one lab later on. You will receive **an F grade** if you miss **more than two lab sessions**. In addition to a typed lab report handed in on paper, you must also upload a Word or PDF file to Canvas. Please see Canvas for additional information about your instructor’s policies and guidelines for your lab reports.

**Homework:**

The purposes of the homework are so that you can gain some practice solving problems, and so that I may assess your grasp of the material before you are tested on it. We will use the WebAssign website for most homework. The online homework assignments will be frequent. “Copying” homework from a friend or working with them online may result in a higher homework grade for you, but it almost guarantees lower test scores. There are many online sources of homework solutions such as Chegg, Yahoo Answers, etc. These generally suck; they can get you to a numerical solution but don’t help you learn. The online homework will only be available for a limited time, so plan your time carefully when the assignments are announced. I will occasionally assign problems to be handed in on good old-fashioned paper, too.

**Exams:**

The exams will be composed primarily of problems which must be solved. Problem solving is a skill. Like riding a bicycle or cat juggling, it must be practiced. Therefore, the homework is an essential part of your test preparation. You cannot “cram” for a physics test. Practice early and practice often. The exam dates are given in the course schedule.

Everyone can have a bad day, and this can happen on an exam day. If you “bomb” a test there is still hope. If you score a higher percentage of the points on the final exam than your lowest test score, the final exam percentage will replace your lowest test score. (e.g. if your lowest test is 45% and you score an 81% on the final exam, your 45% score will be replaced by 81%.)

**If you miss an exam you will need an acceptable, documented excuse to qualify for a makeup. Examples of acceptable excuses are illness or a death in the family. Without an acceptable excuse, you will be given a -0- for the exam. (**Thus, making it, you and I both hope, your lowest exam.) Make-up exams will be given only in situations where a student has already missed an exam and must miss another due to some grave reason, or due to some unavoidable conflict about which ***I am notified in advance*.**

Yes, the final exam is comprehensive and mandatory. Yes, really!

1. **ATTENDANCE and GRADING POLICIES:**

I suggest very strongly that you attend every class. Missing class will have a significant negative impact upon your understanding of the material and consequently your grade. Solutions to most typical or difficult problems will be covered in lecture sections, but especially, the problem solving METHODS will be highlighted. That is not just how to solve a couple particular problems but how to think about ALL problems. In general, students who attend lectures will be far better prepared for the course examinations. I will not regularly take attendance. I treat my students like adults who sometimes have difficult decisions to make about time management. At times, however, I may decide to give a pop quiz or surprise attendance check if I see that attendance has been low recently.

**GRADING POLICY:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Your final grade will be comprised of the following | | | |  |  | | --- | --- | | Area | Grade | | Laboratory | **20%** | | Homework | **20%** | | 4 in class exams | **40%** | | Final Exam | **20%** | | |
| The overall grading scale will be as follows:  Grade are rounded to the nearest hundredth place, so, a 79.99 is a B, not a B+. | |  |  | | --- | --- | | Total Score [%] | Grade | | 88.0 - 100.0 | **A** | | 84.0 - 87.99 | **A-** | | 80.0 - 83.99 | **B+** | | 76.0 - 79.99 | **B** | | 72.0 - 75.99 | **B-** | | 68.0 - 71.99 | **C+** | | 60.0 - 67.99 | **C** | | Not used | **C-** | | 55.0 - 59.99 | **D** | | Below 54.99 | **F** | | |

**Note:** The “incomplete” grade [“I”] should be given only when unusual circumstances warrant. An “incomplete” is not a substitute for a “D,” “F,” or “W.” Refer to the FGCU policy on “incomplete grades.”

1. **REQUIRED COURSE MATERIALS:**

**Text:** University Physics, volumes 1 and 2 from OpenStax publishing. **This is a FREE textbook**, which you can download in a variety of forms following the links below. The FGCU Bookstore will also make copies available. You can use either hard copy or e-text book. (See Webassign information above.)

<https://openstax.org/details/books/university-physics-volume-1>

<https://openstax.org/details/books/university-physics-volume-2>

**FGCU Bookstore information:**

978-1-938168-27-7 for volume 1, print edition

978-1-938168-16-1 for volume 2, print edition

**Calculator:** You should have at your disposal a scientific calculator. Required functions are; √x, x2, log, natural log, ex, sin, cos, tan, sin-1, cos-1, tan-1, yx. If do you not already own one, expect to pay $1 to $200, depending on how fancy you want to get. But note: **NOTICE: Graphing calculators are NOT ALLOWED during exams. This includes the popular TI-8x, 9x etc. series of calculators.** Why? Well, it’s as simple as cheating. You may not know how but it’s possible, and in so many creative ways (Google it.). So, only calculators with at most 4-line displays are allowed. You may not use a smart phone in calculator mode during exams for the same reason. You may use any calculating device you wish during lecture or lab.

1. **WEB LINKS:**

**Canvas:** We will use Canvas for grade records, document storage (including this syllabus), lab report submissions (paper copies may also be required; check with your instructor) and announcements to read between class periods.

<https://fgcu.instructure.com> Your login should be the same as your Eagle Mail.

**Webassign** : <https://www.webassign.net/wa-auth/login> Used for online homework assignments.

**Cost**: According to Webassign, I expect the costs for you to be:

Higher Education Single Term $33.95…. for just one semester

Higher Education Multi-Term\* $51.90….. For both semesters of Gen Phys. (I hope)

\* If you take Gen Phys. II with me, I will use this same textbook. I cannot guarantee that other instructors will. If you take Gen Phys II with another instructor you may have to buy additional access to Webassign content for other textbook publishers.

Webassign access MAY be available through the FGCU Bookstore. Please check with them to ask about this and inform me of any issues you encounter. This is a new textbook arrangement for them and I’m not sure how they may handle purchasing Webassign access through a student expense account or financial aid package.

#### Course name : PHY 2048, section 12596\_12597

**Course key : fgcu 7722 7443**

 THIS Webassign COURSE DOES NOT BEGIN BEFORE JAN 7, SO DON'T BE CONCERNED IF YOU CAN'T LOG IN RIGHT AWAY. When you register, use your name EXACTLY as it appears in Canvas (even if you hate the way it appears in Canvas...). This is essential so that I can copy your homework data into Canvas without errosr.

Webassign is an online homework site that I will use exclusively for graded homework. A subscription to this site is included with the purchase of a new Hybrid textbook. If you are borrowing someone’s text or purchased a different version you may have to purchase a subscription separately. An electronic book is accessible online through enhanced WebAssign, **so you may decide to not purchase a paper text altogether**. A two-week free trial period will end on Jan. 21, so you may sign up immediately upon the start of classes and pay later.

I will use this for course credit, so make sure you purchase a subscription.

1. **Notice Regarding Video or Audio Recording of Instructor**

I work hard on my lectures and have built the materials, explanations, and instructional strategies over many successful years of service to my students and schools. The lectures, pre-lab talks and even office-hour explanations are my creative work. As such, they are protected from unauthorized recording and distribution. **You may not record my lectures or other instructional speech without my explicit, written permission.** Here it is in legalese: “Video and audio recording of class lectures is expressly prohibited unless the FGCU Office of Adaptive Services has documented your disability and determined the best reasonable accommodation for you is to allow recording and you have executed a written agreement regarding the limitations on use of such recordings and their disposition at the end of the semester.”

1. **CLASS SCHEDULE:**

Items below in the lecture or lab schedules may change. Any changeswill be announced in class and on Canvas.

**Lecture Schedule Spring 2019**

| **Date** | **Reading, Topics Covered** | **Due** | **Comments** |
| --- | --- | --- | --- |
| **January** M 7 Session 1 | *Introduction*, Chapter 1, Units and Measurement |  | Review course policies WebAssign overview |
| W 9 Session 2 | Vol. 1, Ch. 2, Vectors |  |  |
| F 11  Session 3 | Vol. 1, Ch. 2, cont. |  |  |
| M 14 Session 4 | Vol. 1, Ch. 3, Motion in One Dimension | HW 1, ch 1 due Mon 1/14 |  |
| W 16  Session 5 | Vol. 1, Ch. 3, cont. | HW 2, ch 2 due Wed 1/16 | Webassign free trial period ends Mon. 1/21 |
| F 18 Session 6 | Vol. 1, Ch. 4 Motion in 2-d and 3-d |  |  |
| M 21 | **MLK Day** | **No Classes** | What to do with the day off? I suggest reading something from MLK himself, or watch a speech. There’s a reason we have this day off. |
| W 23 Session 7 | Vol. 1, Ch. 4 cont. | HW 3, ch 3 due Wed 1/23 |  |
| F 25  Session 8 | Wrap-up, review for exam 1 |  | Exam 1 will cover chapters 1-4 |
| M 28 Session 9 | **\*\*\*\*\*\*\* Exam 1 \*\*\*\*\*\*\*** | HW 4, ch 4 due Mon 1/28 just before the exam | Don't forget to bring your own calculator! |
| W 30 Session 10 | Vol. 1, Ch. 5, Newton’s Laws |  |  |
| **February**  F 1  Session 11 | Vol. 1, Ch. 5 cont. |  |  |
| M 4 Session 12 | Vol. 1, Ch. 5 cont. |  |  |
| W 6 Session 13 | Vol. 1, Ch. 6, Circular Motion and Other Applications of Newton's Laws | HW 5, ch 5 due Fri. 2/8 |  |
| F 8  Session 14 | Vol. 1, Ch. 6, cont. |  |  |
| M 11 Session 15 | Vol. 1, Ch. 6, cont. |  |  |
| W 13 Session 16 | Vol. 1, Ch. 7, Work and Kinetic Energy | HW 6, ch 6 due Wed. 2/13 |  |
| F 15  Session 17 | Vol. 1, Ch. 7, cont. |  |  |
| M 18 Session 18 | Vol. 1, Ch. 7, cont. |  | Exam 2 will cover Chapters 5-6 |
| W 20 Session 19 | **\*\*\*\*\*\*\* Exam 2 \*\*\*\*\*\*\*** | HW 6, ch 6 due Wed. 2/20 | Don't forget to bring your own calculator! |
| F 22  Session 20 | Vol. 1, Ch. 8, Conservation of Energy |  |  |
| M 25 Session 21 | Vol. 1, Ch. 8, cont. | HW 7, ch 7 due Mon. 2/25 |  |
| W 27 Session 22 | Vol. 1, Ch. 8 cont, , Begin Chapter 9, Linear Momentum and Collisions |  |  |
| **March**  F 1  Session 23 | Vol. 1, Ch. 9, cont | HW 8, ch. 8, due Fri 3/1 |  |
| M 4 | **No classes, spring break** |  |  |
| W 6 | **No classes, spring break** |  |  |
| F 8 | **No classes, spring break** |  |  |
| M 11  Session 24 | Vol. 1, Ch. 10, Rotation of Rigid Objects |  |  |
| W 13  Session 25 | Vol. 1, Ch. 10, cont. | HW9, ch9, due Wed. 3/13 |  |
| F 15  Session 26 | Wrap-up, review for exam 3 |  | Exam 3 will cover Chapters 7-10 |
| M 18  Session 27 | **\*\*\*\*\*\*\* Exam 3 \*\*\*\*\*\*\*** | HW 10, ch. 10 due Mon. 3/18 just before exam | Don't forget to bring your own calculator! |
| W 20 Session 28 | Vol. 1, Ch 11, Angular momentum |  |  |
| F 22 Session 29 | Vol. 1, Ch. 11, cont. |  |  |
| M 25  Session 30 | Vol. 1, Ch. 12, Static Equilibrium and Elasticity | HW11, ch. 11 due Mon. 3/25 |  |
| W 27 Session 31 | Vol. 1, Ch. 12, cont. |  |  |
| F 29 Session 32 | Vol. 1, Ch. 13, Gravitation | HW12, Ch. 12 due Fri 3/29 | **Friday March 29 2019 is the last day to withdraw from classes without academic penalty.** |
| **April**  M 1  Session 33 | Vol. 1, Ch. 13, Gravitation, cont. |  | Exam 4 will cover Chapters 11-13 |
| W 3 Session 34 | **\*\*\*\*\*\*\* Exam 4 \*\*\*\*\*\*\*** | HW 13, Ch. 13 due Mon 4/3; just before exam | Don't forget your calculator! |
| F 5 Session 35 | Vol. 1, Ch. 14, Fluid Mechanics |  | Vol. 1, Chs. 14&15 and  Vol. 2. Chs 1-4 will be new material on the final exam. |
| M 8  Session 36 | Vol. Ch. 14, cont. |  | About 30% the final will consist of new material, 70% cumulative. |
| W 10 Session 37 | Vol. 1, Ch. 15, Oscillatory Motion | HW 14, Ch. 14 due Wed 4/10 |  |
| F 12 Session 38 | Vol. 2, Ch. 1, Temperature |  |  |
| M 15  Session 39 | Vol. 2, Ch. 2, Kinetic theory of gases | HW 15, Ch. 15 due Mon 4/15 |  |
| W 17 Session 40 | Vol. 2, Ch. 3, 1st Law of Thermo | HW 16, Vol. 2 Ch. 1 due Thur. 4/18 |  |
| F 19 Session 41 | Vol. 2, Ch. 3, cont. |  |  |
| M 22  Session 42 | Vol. 2, Ch. 4, 2nd Law of Thermo | HW 17, Vol. 2 Ch. 2 due Mon. 4/22 |  |
| W 24 Session 43 | Vol. 2, Ch. 4, cont. | HW 18, Vol. 2 Ch. 3 due  Fri. 4/26 | **Last Lecture**  Last Day of FGCU Classes is Th 4/25 |
| **Wed. May 1 10:00 AM - 12:15 PM** | **FINAL EXAM for CRNs 12596, 12597**  **SEIDLER room 220** | HW 18, Vol. 2 Ch. 4 due  just before final exam | Don't forget your calculator! |

**LAB SCHEDULE TENTATIVE for General Physics I (watch Canvas carefully for changes)**

**Dr. Boucher (course leader), Spring 2019**

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| --- | --- |
| **Lab Meetings:**  **W 7:30am – 9:10am, BHG 267 (12596)**  **F 7:30am – 9:10am, BHG 267 (12597)**  **Lab Instructor: Niles Kin** | **All sections will be synchronized as much as possible given the schedule (especially MLK Day). So, usually, all sections will do the same lab procedure in the same calendar week.** |

| **Date** | **Laboratory activity** | **Report Due: printed copy AND one submitted to Canvas♣** |
| --- | --- | --- |
| **January**  W 9 | Orientation, policies, attendance |  |
| F 11 | Orientation, policies, attendance |  |
| W 16 | Lab 1, Equilibrium of Forces | No report due |
| F 18 | Lab 1, Equilibrium of Forces | No report due |
| W 23 | Lab 2, Graphical Representation of motion | Lab 1 |
| F 25 | Lab 2, Graphical Representation of motion | Lab 1 |
| W 30 | Lab 3, Freefall | Lab 2 |
| **February**  F 1 | Lab 3, Freefall | Lab 2 |
| W 6 | Lab 4, Projectile Motion | Lab 3 |
| F 8 | Lab 4, Projectile Motion | Lab 3 |
| W 13 | Lab 5, Constant Acceleration | Lab 4 |
| F 15 | Lab 5, Constant Acceleration | Lab 4 |
| W 20 | Lab 6, Centripetal Force | Lab 5 |
| F 22 | Lab 6, Centripetal Force | Lab 5 |
| W 27 | Lab 7, Momentum Conservation | Lab 6 |
| **March**  F 1 | Lab 7, Momentum Conservation | Lab 6 |
| W 6 | **No lab Spring Break** | No report due |
| F 8 | **No lab Spring Break** | No report due |
| W 13 | Lab 8, Cons. Of Ang. Momentum | Lab 7 |
| F 15 | Lab 8, Cons. Of Ang. Momentum | Lab 7 |
| W 20 | Lab 9, Torque and equilibrium | Lab 8 |
| F 22 | Lab 9, Torque and equilibrium | Lab 8 |
| W 27 | Problem solving | No report due |
| F 29 | Problem solving | No report due |
| **April**  W 3 | Lab 10, Buoyancy | Lab 9 |
| F 5 | Lab 10, Buoyancy | Lab 9 |
| W 10 | Lab 11, Mass on a Spring | Lab 10 |
| F 12 | Lab 11, Mass on a Spring | Lab 10 |
| W 17 | Make-up Lab\* | Lab 11 |
| F 19 | Make-up Lab\* | Lab 11 |
| W 24 | No lab meeting | To keep the weekly schedules the same, Wed lab will not meet because Friday’s lab can’t meet |
| F 26 | No lab meeting , classes ended 4/25 |

♣ I require a paper copy and an identical report uploaded to Canvas. See details in the syllabus and under “Assignments” in Canvas.

\* Only students who have missed a lab session during the rest of the semester are allowed to perform the make-up lab. The make-up lab reports are due at the time you take the final exam.

1. **ANY OTHER INFORMATION OR CLASS PROCEDURES OR POLICIES:**

**Center for Academic Achievement Syllabus Statement:**

 The Center for Academic Achievement (CAA) offers academic support services for any FGCU student.  The services are at no extra charge to students and include: peer tutoring, Supplemental Instruction, Student Success Workshops, and individualized academic coaching.  If you would like to participate in or learn more about these services, please visit the CAA in Library 103.  You may also email the CAA at [caa@fgcu.edu](https://webmail.fgcu.edu/owa/redir.aspx?C=0hYW0d4RlEaqYkpC5GZmSNhxXm8GitEI6HILGfNW7OVQIK0SATYrx9G31EticWduUVa7p0gVmOg.&URL=mailto%3acaa%40fgcu.edu) or call at (239) 590-7906.  The CAA website is <https://www2.fgcu.edu/CAA/index.html> .