

**COP 2271 - COMPUTER PROGRAMMING FOR ENGINEERS, VB.NET SECTION
FALL 2011**

- 1. Catalog Description:** Computer programming and the use of computers to solve engineering and mathematical problems. Emphasis will be placed on applying problem solving skills. This intensive course is specifically directed towards those students who are pursuing technical careers in fields employing a reasonably high degree of mathematics (2 credits).
- 2. Prerequisites:** MAC 2312
- 3. Course Objectives:** Provide VB .NET language skills. Provide engineering problem solving skills using structured and object oriented programming. Provide experience in project development and meeting requirements.
- 4. Contribution of course to meeting the professional component:** This is a course with design content. Throughout the semester, students will complete 5 individual programming assignments expected to meet specific design criteria.
- 5. Relationship of course to program outcomes:** This course contributes to the program outcomes by teaching students to: Apply knowledge of mathematics, science and engineering; Design a system, component, or process to meet desired needs; Identify, formulate and solve engineering problems; Understand contemporary engineering issues; Use the techniques, skills, and modern engineering tools necessary for engineering practice; Integrate systems using appropriate analytical, computational and experimental practices.
- 6. Instructor**
 - a. Office location:** 450 Weil Hall
 - b. Telephone:** 352-275-3975
 - c. E-mail address:** fengtk@ufl.edu
 - d. Web site:** E-learning (lss.at.ufl.edu)
 - e. Office hours:** T8-9th period
- 7. Teaching Assistants**
 - a. Office location:** 202 Weil Hall
 - b. E-mail address:** posted on the course web-site
 - c. Office hours:** posted on the course web-site
- 8. Meeting Times and Location:** M 8-9 periods, FLG 0245
- 9. Material and Supply Fee:** N/A
- 10. Textbook and Software Required**
 - a)** CGS2421 Lecture Notes VB .NET Version, Kirli, available at the University Copy Center, 1620 West University Ave., contains copies of the notes that you will see in the lectures. The lecture notes are also posted on the course web-site.
 - b)** PowerPoint slides will be posted on the course web site.
 - c)** Microsoft Visual Studio .NET 2010, downloadable from the MSDNAA website.
- 11. Computer Requirement:** You must have a notebook computer to sign up for this course. The notebook computer is necessary for the in-class exercises. Homeworks will be submitted via the E-learning web-site.

12. Attendance and Expectations: Attendance is not required, but strongly recommended. It will be to your benefit to attend all lectures. You will be responsible for everything covered in class even if it is not in the textbook. There may be pop quizzes as well.

Lectures are there to facilitate efficient learning, not chatting with friends, surfing the net, reading the Alligator, or sleeping. You should be focused on the course material, not on activities that do not involve course work. Those who behave inappropriately will be asked to leave. If you feel like you cannot follow the lecture anymore, you can leave the classroom quietly; I will not be offended. **Please remember to turn off your cell phones as soon as you enter the classroom.**

13. Grading Policy: Your grade will be based on four in-class exams. I may decide to factor in the homeworks as well, in which case the weight of each exam will drop below 25%.

Exam-1	25%
Exam-2	25%
Exam-3	25%
Exam-4	25%
Total	100%

14. Grading Scale:

There may or may not be a curve at the end of the semester. This of course depends on the overall performance of the class throughout this semester. Please keep in mind that A is not your birth-right. In fact, the percentage of As in this course have historically in the 20-25% range. You have to study very hard and perform well in order to deserve an A.

Also keep in mind that this is a required course of ISE students. This means that you must earn a C at minimum in order to satisfy the requirement.

Grade	Range
A	90-100
A-	87-90
B+	84-87
B	80-84
B-	77-80
C+	74-77
C	70-74
C-	67-70
D+	64-67
D	60-64
D-	57-60

Note: "A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

15. Makeup Exam Policy: Students needing a make-up exam due to schedule conflicts must notify the instructor at least one week before the day the exam is scheduled for.

16. Exams: Your grade will be based on four exams, each of which will be worth 25% of your final grade. The exams will be comprehensive, covering all the topics discussed up to that point. I will give you ample time (1 hour and 45 minutes); in return I will ask you to develop complete programming solutions on your laptop.

In each exam, I include a few challenging tasks, which only the best students will be able to answer. These are the questions that separate A students from the rest.

17. Course Outline:

Date	Content	Chapter
Aug.22	Introduction	
Aug.24, 29	Basics of VB.net	Chapter 2
Aug. 31	Decision Making	Chapter 3
Sep. 7, 12	Visual Programming	Chapter 4
Sept. 14	Loops - 1	Chapter 5
Sept. 19	Exam - 1	
Sept. 21	Loops - 2	Chapter 5
Sept. 26, 28	Modular Programming	Chapter 6
Oct. 3, 5, 10	Data Structure	Chapter 7
Oct. 12	Exam - 2	
Oct. 17, 19	Object Oriented Programming - 1	Chapter 8
Oct. 26, 31	Object Oriented Programming - 2	Chapter 8
Nov. 2	File Processing - 1	Chapter 9
Nov. 7	Exam -3	
Nov. 21, 23	File Processing - 2	Chapter 9
Nov. 28	File Processing - 3	Chapter 9
Nov. 30	File Processing - 4	Chapter 9
Dec. 5	Multimedia	Chapter 12
Dec. 7	Exam-4	

18. Honesty Policy: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

19. Accommodation for Students with Disabilities: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students

Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

20. UF Counseling Services: Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
- SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

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