Cover Sheet: Request 16121

COP 3XXX - Programming Language Survey

Info

Process	Course|New|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Jeremiah Blanchard jblanch@cise.ufl.edu
Created	4/21/2021 3:10:31 PM
Updated	5/13/2021 4:36:51 PM
Description of request	Request to add the following new course, variable credit, to address new programming languages as they are developed:

An introduction to a specific programming language, which may vary according to section. Course may be repeated for different languages. Some programs may have departmental limits on the number of credit hours that may count toward degree programs. This course will not count as technical elective credit for Computer Science or Computer Engineering majors. (1-3) |

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Computer and Information Science and Engineering 19140000	Christina Gardner-McCune		4/23/2021
No document changes					
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by HWCOE Curriculum Committee and Faculty Council	5/13/2021
COP3XXX-Syllabus.docx					5/3/2021
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			5/13/2021
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 16121

Info

Request: COP 3XXX - Programming Language Survey
Description of request: Request to add the following new course, variable credit, to address new programming languages as they are developed:

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Submitter: Jeremiah Blanchard jblanch@cise.ufl.edu
Created: 5/3/2021 4:34:16 PM
Form version: 5

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

> Response:
> COP

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
Note: 5000 level courses must be submitted through the undergraduate new course process

> Response:
> 3

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

> Response:
> XXX

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

> Response:
> Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate

• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Council)

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Programming Language Survey

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Programming Language Survey

Degree Type
Select the type of degree program for which this course is intended.

Response:
Baccalaureate

Delivery Method(s)
Indicate all platforms through which the course is currently planned to be delivered.

Response:
On-Campus

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term

Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic?

Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
Yes

Repeatable Credit?

Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
Yes

If repeatable, # total repeatable credit allowed

Indicate the maximum number of total repeatable credits allowed per student.

Response:
9

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
Variable

If variable, # min

Response:
1

If variable, # max

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week on average throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines.

Response:
An introduction to a specific programming language, which may vary according to section. Course may be repeated for different languages. Some programs may have departmental limits on the number of credit hours that may count toward degree programs.

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

> Response:
> Basic computer experience; dependent on section's language offering

Completing Prerequisites on UCC forms:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

Example: A grade of C in HSC 3502, passing grades in HSC 3057 or HSC 4558, and undergraduate PBH student should be written as follows: HSC 3502(C) & (HSC 3057 or HSC 4558) & UGPBH
* *

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

> Response:
> N/A,

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

> Response:
> Computer science is ever-evolving; the capacity to address new languages quickly in the curriculum is critical to preparing students to be nimble scientists and engineers.
>
> This course's variable credit will be tied to the complexity of content and number of meetings. a 3-credit variant will meet 3 periods weekly; a 2-credit, 2 periods weekly; and for 1-credit, 1 period weekly.
>
> Example: A course for students learning a new and complex language, such as Rust, would be allocated 3 credits, as there is significant content to be covered, requiring three periods weekly. By comparison, another course could focus on the C language for students who already know C++; as these languages are closely related, such a course may be taught via a 1-credit course offering meeting once weekly.
>
> Note that the attached syllabus represents an example for a 3-credit variant that would meet 3 times weekly.

Course Objectives

Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
Read and understand programs in the language,
Design and implement programs in the language,
Compile and execute programs to get results in the language, and
Debug (identify and fix) syntax, semantic, and logic errors in source code in the language.

Course Textbook(s) and/or Other Assigned Reading

*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
dependent on section's language offering

Weekly Schedule of Topics

Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week 1:   Introduction to Computer Language / Quiz 1 (Syllabus)
Week 2:   Variables, Arithmetic, & IO / Quiz 2 / Ex. 1
Week 3:   Program Control / Quiz 3 / Ex. 2
Week 4:   Methods & Data Types / Quiz 4 / Ex. 3
Week 5:   Arrays / Quiz 5 / Ex. 4
Week 6:   Review & Exam 1
Week 7:   Multi-Dimensional Arrays / Ex. 5
Week 8:   Software Engineering Principles / Quiz 6 / Ex. 6
Week 9:   Classes / Quiz 7 / Ex. 7
Week 10: Inheritance / Quiz 8 / Ex. 8
Week 11: Searching & Sorting Algorithms / Quiz 9 / Ex. 9
Week 12: Review & Exam 2
Week 13: Recursion
Week 14: File IO & Exceptions / Quiz 10 / Ex. 10
Week 15: Final Exam

Grading Scheme

List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Quizzes (10-Drop-1):   18%
Exercises (10-Drop-1):   18%
Projects (4):   32%
Midterm Exams   20%
Final Exam   12%

Exercises are short programming assignments and homework problems due approximately once a week, while Projects are long assignments due once every 3 weeks. Exercises and Projects

must be completed individually. The details of project submissions will be given for each assignment and include submissions to (Canvas) on the due date assigned within the project specification.

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• *Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:*
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• *Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.*

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.

A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• 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/public-results/. 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/.

* *

    Response:
    Yes

Programming Language Survey
COP 3XXX
Academic Term: Fall 2021
Lecture: MWF 3pm-3:50pm

Instructor:
Jeremiah Blanchard
jjb@eng.ufl.edu
352-294-6643

Course Description
An introduction to programming using a specific programming language, which may vary according to section. May be repeated for different languages. (1-3)

Course Pre-Requisites
Basic computer experience; dependent on section's language offering

Course Objectives
By the end of the semester, successful students should be able to…
•   Read and understand programs in the language,
•   Design and implement programs in the language,
•   Compile and execute programs to get results in the language, and
•   Debug (identify and fix) syntax, semantic, and logic errors in source code in the language.

Materials and Supply Fees
None

Relation to Program Outcomes (ABET):

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	
3. An ability to communicate effectively with a range of audiences	
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	Low
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	
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	
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.

Required Textbooks and Software
Varies based on language.

Course Schedule
Week 1:   Introduction to Computer Language / Quiz 1 (Syllabus)
Week 2:   Variables, Arithmetic, & IO / Quiz 2 / Ex. 1
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Week 12:   Review & Exam 2
Week 13:   Recursion
Week 14:   File IO & Exceptions / Quiz 10 / Ex. 10
Week 15:   Final Exam

Online Course Recording
Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance of lectures highly recommended. Students are liable for all announcements made lecture or discussion. Quizzes may only be taken during the assigned discussion period. Make up work for graded class activities are provided given appropriate documentation is presented. Excused absences must be consistent with University policies in the undergraduate catalog (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/) and meet University requirements regarding excused absences.

Late work [such as *homework*, this is not applicable to in class activities or Exams which must be completed by the assigned date/time of the activity unless the absence is excused]: Except in the case of excused absence consistent with University policies per the undergraduate catalog, no work will be accepted late.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
Quizzes (10-Drop-1)	20 each	18%
Exercises (10-Drop-1)	20 each	18%
Projects (4)	80 each	32%
Midterm Exams	100 each	20%
Final Exam	120	12%
		100%

Exercises & Projects
Exercises are short programming assignments and homework problems due approximately once a week, while Projects are long assignments due once every 3 weeks. Exercises and Projects must be completed individually. The details of project submissions will be given for each assignment and include submissions to (Canvas) on the due date assigned within the project specification.

Grading Policy

The range used to calculate your final letter grade in our course will be no harsher than this grading scale provided in the following table.

Percent	Grade	Grade Points
93.4 - 100	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	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/.

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/policies/student-honor-code-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 broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

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 Graduate Program Coordinator
• Robin Bielling, Director of Human Resources, 352-392-0903, rbielling@eng.ufl.edu
• Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.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: http://www.counseling.ufl.edu/cwc, 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 suppor*t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.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://care.dso.ufl.edu.

On-Line Students Complaints*:* http://www.distance.ufl.edu/student-complaint-process.