

Cover Sheet: Request 15368

COP 4XXX - Algorithm Abstraction & Design

Info

Process	Course New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Jeremiah Blanchard jblanch@cise.ufl.edu
Created	10/26/2020 1:48:58 PM
Updated	12/7/2020 2:29:57 PM
Description of request	After careful evaluation of student needs, industry expectations, and the broader expectations of the CS educational community (as embodied in the CS2013 standards by ACM), the faculty of the CISE department have approved the additional course "Algorithm Abstraction & Design" as part of the core coursework in the Computer Science undergraduate programs. This course covers additional topics not covered currently covered by required in the CS undergraduate programs, and covers existing algorithmic topics in more depth, in order to meet those expectations. This new course request is part of a broader degree change supported by the faculty.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Computer and Information Science and Engineering 19140000	Christina Gardner-McCune		10/30/2020
No document changes					
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by the HWCOE Curriculum Committee and Faculty Council	11/17/2020
Cummings Letter of Support CLAS COP3XXX Algorithm Abstraction and Design.pdf					11/6/2020
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			11/17/2020
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 15368

Info

Request: COP 4XXX - Algorithm Abstraction & Design

Description of request: After careful evaluation of student needs, industry expectations, and the broader expectations of the CS educational community (as embodied in the CS2013 standards by ACM), the faculty of the CISE department have approved the additional course "Algorithm Abstraction & Design" as part of the core coursework in the Computer Science undergraduate programs. This course covers additional topics not covered currently covered by required in the CS undergraduate programs, and covers existing algorithmic topics in more depth, in order to meet those expectations. This new course request is part of a broader degree change supported by the faculty.

Submitter: Jeremiah Blanchard jblanch@cise.ufl.edu

Created: 10/23/2020 2:36:06 PM

Form version: 1

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.).

Response:

4

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:

Advanced

- 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:
Algorithm Abstraction and Design

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:
Algorithm Abstraction & Design

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, UF Online - Please attach a letter of support from the Director of the UF Online program

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:
Fall

Effective Year

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

Response:
2021

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:
No

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:
No

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:
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:

3.33

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:

Covers algorithmic concepts and their use rooted in practical application and computer science theory. Topics include algorithmic paradigms, limits of computing, and algorithm time complexity classes.

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:

COP3530

Completing Prerequisites on UCC forms:

- Use "&" and "or" to conjoin multiple requirements; do not use 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:
The goal of this course should be to broaden student views of algorithms and their use and to root practical application in the context of computer science theory. Specifically, this course fills the role of meeting CS2013 ACM standards not otherwise addressed, or addressed only briefly, in other courses in the CS curriculum. Topics in the course will be covered within the context of algorithmic concepts and with the goal of facilitating practical application in later coursework. By extension, decidability will be discussed as limitations / challenges of algorithm development and will prime discussion of how many algorithms can be abstracted and are equivalent (e.g., NP-completeness).

Course Objectives

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

Response:
By the end of the semester, successful students should be able to...

- Describe algorithmic paradigms common in computer science theory;
- Implement algorithms utilizing common algorithmic patterns and concepts;
- Identify problem sets that are limited by the limits of modern computing devices and logic;
- Classify algorithms into time complexity classes.

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:

- Algorithm Design by Jon Kleinberg; March 16, 2005 – 1st Edition; ISBN 978-0321295354
- Theory of Computation, Making Connections by Jim Hefferon; Open Source (2020).

For specific readings, see weekly schedule.

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: Designing Ethical Algorithms
Week 2: Graph Traversals / Kleinberg 3.3-3.6 / Quiz 1 / Exercise 1
Week 3: Greedy Algorithms / Kleinberg 4.1-4.4 / Quiz 2 / Exercise 2
Week 4: Spanning & Compression / Kleinberg 4.5-4.8 / Quiz 3 / Exercise 3
Week 5: Divide & Conquer Algorithms / Kleinberg 5 / Quiz 4 / Exercise 4
Week 6: Dynamic Programming (1) / Kleinberg 6.1-6.5 / Quiz 5 / Exercise 5
Week 7: Dynamic Programming (2) / Kleinberg 6.6-6.10 / Quiz 6 / Exercise 6
Week 8: Review & Midterm Exam
Week 9: Regular Languages / Hefferon 4.1-4.6
Week 10: Context-Free Languages / Hefferon 4.7-End of Chp 4 / Quiz 7 / Exercise 7
Week 11: Turing Machines / Hefferon 5.1-5.4 / Quiz 8 / Exercise 8
Week 12: NP & Computability (1) / Kleinberg 8.1-8.5 / Quiz 9 / Exercise 9
Week 13: NP & Computability (2) / Kleinberg 8.6-8.10 / Quiz 10 / Exercise 10
Week 14: Decidability & Reducibility / Quiz 11 / Exercise 11
Week 15: Review & Reading Days
Week 16: 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:

Assignment	Total Points	Percentage of Final Grade
Quizzes (11-Drop-1)	20 each	20%
Exercises (11-Drop-1)	20 each	20%
Projects (4-Drop-1) 100		30%
Midterm Exam	120	12%
Final Exam 180		18%
Total		100%

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 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

Accommodations

*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 required 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

Algorithm Abstraction and Design

COP 4XXX

Academic Term: Fall 2021

Lecture: MWF 3pm-3:50pm

Discussion: Thurs 3pm-3:50pm

Instructor:

Name

[Email Address](#)

Office Phone Number

Course Description

Covers algorithmic concepts and their use rooted in practical application and computer science theory. Topics include algorithmic paradigms, limits of computing, and algorithm time complexity classes. (3)

Course Pre-Requisites

COP 3530

Course Objectives

By the end of the semester, successful students should be able to...

- Describe algorithmic paradigms common in computer science theory;
- Implement algorithms utilizing common algorithmic patterns and concepts;
- Identify problem sets that are limited by the limits of modern computing devices and logic;
- Classify algorithms into time complexity classes.

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	
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	Low
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

- Algorithm Design by Jon Kleinberg; March 16, 2005 – 1st Edition; ISBN 978-0321295354
- [Theory of Computation, Making Connections](#) by Jim Hefferon; Open Source (2020).

Course Schedule

Week 1:	Designing Ethical Algorithms
Week 2:	Graph Traversals / Kleinberg 3.3-3.6 / Quiz 1 / Exercise 1
Week 3:	Greedy Algorithms / Kleinberg 4.1-4.4 / Quiz 2 / Exercise 2
Week 4:	Spanning & Compression / Kleinberg 4.5-4.8 / Quiz 3 / Exercise 3
Week 5:	Divide & Conquer Algorithms / Kleinberg 5 / Quiz 4 / Exercise 4
Week 6:	Dynamic Programming (1) / Kleinberg 6.1-6.5 / Quiz 5 / Exercise 5
Week 7:	Dynamic Programming (2) / Kleinberg 6.6-6.10 / Quiz 6 / Exercise 6
Week 8:	Review & Midterm Exam
Week 9:	Regular Languages / Hefferon 4.1-4.6
Week 10:	Context-Free Languages / Hefferon 4.7-End of Chp 4 / Quiz 7 / Exercise 7
Week 11:	Turing Machines / Hefferon 5.1-5.4 / Quiz 8 / Exercise 8
Week 12:	NP & Computability (1) / Kleinberg 8.1-8.5 / Quiz 9 / Exercise 9
Week 13:	NP & Computability (2) / Kleinberg 8.6-8.10 / Quiz 10 / Exercise 10
Week 14:	Decidability & Reducibility / Quiz 11 / Exercise 11
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 (11-Drop-1)	20 each	20%
Exercises (11-Drop-1)	20 each	20%
Projects (4-Drop-1)	100	30%
Midterm Exam	120	12%
Final Exam	180	18%
		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.bluer.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 support, 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>.

November 2, 2020

Dr. Joseph Spillane
College of Liberal Arts and Sciences
P.O. Box 112015
University of Florida
Gainesville, FL 32611-2015

Dr. Spillane:

We are pleased to support the College of Liberal Arts and Sciences' plan to offer a new online course, Algorithm Abstraction and Design (COP3XXX). We are delighted to welcome this course into UF Online and I believe that this program will contribute positively to the needs of UF Online students. UF Online looks forward to working with you and your colleagues to ensure this offering thrives for many years to come.

Sincerely,



Evangeline J. Tsibris Cummings
Assistant Provost and Director of UF Online

Cc:

Dr. Juan Gilbert, Department Chair, Department of Computer & Information Science & Engineering,
Herbert Wertheim College of Engineering

Dr. Jeremiah Blanchard, CISE UF Online Director, Department of Computer & Information Science &
Engineering, Herbert Wertheim College of Engineering

Dr. Christina Gardner-McCune, Associate Professor, Department of Computer & Information Science &
Engineering, Herbert Wertheim College of Engineering