DO NOT TYPE IN THIS BOX
Bulletin # : _____
Academic Year : _____

FLORIDA INTERNATIONAL UNIVERSITY
UNIVERSITY CURRICULUM COMMITTEE
Proposal for a New Course

1. **School/College** Engineering and Computing

   Div./Dept. in Which Taught School of Computing and Information Sciences

2. | IDC | X | | | 1 |
   |---|---|---|---|---|
   | Alpha Prefix | 1st Digit | Last 3 Digits | "C"-lec-lab "L"-Lab | Cr. Hrs. |

   CIP Code *(Leave this blank):* _____

3. **Grading Method (select one):** ☒ Graded ☐ Pass/Fail

4a. **Course Title** Community Service Outreach and Mentoring

b. **Abbreviated course Title** *(for computer class schedules, transcripts)* Community Outreach Mentor

LIMITED TO 25 Characters *(including spaces)*

5. **Statewide Course Numbering Subject Matter Area** IDC (Interdisciplinary Computing)

6. **Catalog Description/Major Topics** *(not to exceed 200 characters including spaces)*

College of Medicine and College of Law: Attach description not exceeding 1,000 characters including spaces.

Provide students with the experience of attending an annual conference for underrepresented minorities in CS/IT, and the experience of doing a community outreach of mentoring K-12 students.

7. **Attach detailed syllabus course outline and course justification on separate page(s).**
8. **Prerequisite(s):** None
9. **Corequisite(s):** None
10. **Objective(s) of Course:**

1. Attend Underrepresented Minorities Conference on CS/IT
2. Share Conference Content with Fellow Students via Presentations and Panel Discussions
3. Mentor Middle and High School Students

11. **Does this course duplicate/overlap other courses at FIU?** ☒ No ☐ Yes
    If yes, please explain: _____
12. **What other closely related department(s) have been consulted about this course?**
13. **Is this course used for the assessment of a program or a certificate (if yes, then send a notification to assessment@fiu.edu)?** No Yes

PROPOSAL REQUESTED BY:

Faculty Contact Maria Charters (Type name) — mCharters (Signature) — 3 / 21 / 2019

charters@cis.fiu.edu (Email address) — 305-348-7981 (Phone number)

Chairperson (Dept./Div.) S.S. Iyengar (Type name) — S. I (Signature) — 3 / 21 / 2019

Chairperson (Curr. Comm.) Cesar Levy (Type name) — (Signature) — / / 2019

College/School Dean John Volakis (Type name) — (Signature) — / / 2019

Submit one original form. Attach one copy of the course justification and course syllabus, course description, objectives, major topics and textbooks.

Community Service Outreach and Mentoring

New Course Justification

University students funded to attend underrepresented minorities conferences in CS/IT (e.g. Grace Hopper Conference), are asked to participate in community service by sharing what they have learned with other students at the university and in middle and high school. This sharing will serve to encourage broadening participation from underrepresented groups in CS/IT.

The conference attendees are also asked to mentor a middle or high school student in the creation of a mobile app, to give them experience developing software, and to be a role model for them when considering a career in CS/IT.

School of Computing and Information Sciences

Course Title: Community Service Outreach and Mentoring **Date:** Mar 20, 2019

Course Number: IDC XXXX

Number of Credits: 1

Subject Area: Interdisciplinary Computing

Subject Area Coordinator: Mark Weiss
email: weiss@cis.fiu.edu

Catalog Description: Provide students with the experience of attending an annual conference for underrepresented minorities in CS/IT, and the experience of engaging in a community outreach of mentoring K-12 students for an entire semester, to encourage broadening participation from underrepresented groups.

Textbooks: *None*

Prerequisite Courses: None

Corequisites Courses: None

Type: General Elective

Prerequisite Topics: (none)

Course Outcomes:

O1. Be able to attend a resume and mock interview workshop for IT/CS/CE majors, to prepare for interviewing opportunities available at a conference for underrepresented minorities.
O2. Be able to attend a 4-day conference for underrepresented minorities.
O3. Be able to create, turn in, and deliver a presentation on the knowledge gained from attending multiple sessions at the conference.
O4. Be able to serve on a panel of fellow conference attendees, to share knowledge and experiences gained by attending conference, with other FIU students.
O5. Be able to provide 12 weeks of mentoring to at least one middle or high school student mentee, by participating in the following activities:
   a. 1 full day, instructor-led workshop on mobile app creation with mentee
   b. 12 weekly, 1-hour Skype/Google Hangout video conference calls with mentee
   c. 12 weekly discussion board postings to report progress of mentoring activities
   d. 1 full day at the annual CodeFest event at FIU, mentoring a middle or high school student, and providing feedback on mentees' final mobile app creation

This course should be taught by FIU faculty or staff that have previously attended a conference for underrepresented minorities, who have had experience with mobile app development, and have attended FIU's annual CodeFest event.

Relationship between Course Outcomes and Program Outcomes

BS in CS: Program Outcomes	Course Outcomes
a) Demonstrate proficiency in the foundation areas of Computer Science including mathematics, discrete structures, logic and the theory of algorithms	
b) Demonstrate proficiency in various areas of Computer Science including data structures and algorithms, concepts of programming languages and computer systems.	
c) Demonstrate proficiency in problem solving and application of software engineering techniques	
d) Demonstrate mastery of at least one modern programming language and proficiency in at least one other.	
e) Demonstrate understanding of the social and ethical concerns of the practicing computer scientist.	
f) Demonstrate the ability to work cooperatively in teams.	O1, O2, O3, O4
g) Demonstrate effective communication skills.	O5

Outline

Topic	Number of Lecture Hours	Outcome
● Preparation of Resume and Mock Interviews o Resume styles and formats o Interviewing preparation and strategies	4	O1
● Attendance at Underrepresented Minorities Conference o Selection of track sessions at conference o Travel to/from conference o Attendance of track sessions and taking notes o Attendance of career showcase and interviews	18	O2
● Presentation and Panel Discussion o Summarization of attended conference track session notes o Creation of presentation from bulleted notes and pictures o Delivery of presentation and notes to panel o Participation in panel discussion at FIU	4	O3
● Mentoring of Middle/High School Student(s) o 1 day participation in instructor-led workshop on a mobile app creation tool with high school/middle school mentee o 12 weekly, 1-hour video conference calls with high school/middle school mentee, on progress of mobile app creation o 12 weekly discussion board postings on status of mentee's app creation, and topics/issues addressed during each weekly conference call o 1 day participation in CodeFest at FIU, providing mentoring to high school/middle school mentees	14	O4

Course Outcomes Emphasized in Laboratory Projects / Assignments

Projects and assignments will interactive lessons presented by students, as well as programming, projects done individually and collaboratively. Teaching demonstrations should be completed in a laboratory environment that includes short lectures by the instructor.

Outcome	
O1	Students will be able to prepare resumes and practice interviewing skills
O2	Students will be able to experience attendance at a conference for underrepresented minorities in Computer Science.
O3	Students will be able to share their knowledge gained at a conference both verbally and in writing.
O4	Students will be able to develop leadership and mentoring skills by being a mentor to a middle or high school student for an entire semester.

Oral and Written Communication:

- Written and oral discussions of social issues in computing

Theoretical Contents:

- Abstraction
- Basic algorithmic thinking

Problem Analysis Experiences:

None

Solution Design Experiences:

- Weekly video conference calls, progress report discussion board postings, mobile app programming