# CSC 499 – Computer Science Internship

Syllabus - Updated June 2018

# Quick Facts

Facilitator:	David H. Brown
Office Location:	Tyler Hall 252 (top floor; third office down the corridor near the East stairs)
Telephone:	874-4223
Email (preferred):	david_h_brown@uri.edu
Office Hours:	see Starfish for walk-in and by-appointment times
Final exam:	None
Prerequisites:	Advanced standing in computer science and departmental approval

"Advanced standing in computer science" generally means you have passed CSC 212 and have completed your Sophomore (second) year. Department approval is granted by me based on a one-page proposal you prepare once you have secured your internship. See <a href="http://www.cs.uri.edu/csc-499/project-proposal/">http://www.cs.uri.edu/csc-499/project-proposal/</a> for information.

# **Course Description**

**PRA**: (4 crs.) Supervised work on a capstone project in computer science that prepares students for careers in industry and graduate study. (Practicum) Pre: advanced standing in computer science and departmental approval. Normally taken twice in two consecutive semesters. May be repeated for a maximum of 8 credits. Not for graduate credit. S/U credit.

Note: The course description needs updating. Normally, the course is taken only once: the BS used to required 8CR of CSC 499 but now requires only 4CR. While it can still be repeated, we discourage this.

# Student Learning Outcomes

- Develop real-world experience in your field
- Enhance "soft skills" such as teamwork and attendance critical to success in the workforce
- Learn about workplace issues such as motivation, ethics, and office culture
- Apply skills learned in courses to real-world experience in a professional setting
- Reflect upon and document your work and its value with reports and a presentation

# Course Outline / Schedule of assignments

The actual dates will vary depending on the semester in which you enroll. Fall and Spring are nominally 13-week semesters, but there might be partial weeks at the beginning or end. Summer Session 3 provides a 10-week course, but if it doesn't fill we might be able to offer independent study during Summer Session 2 which compresses everything into only 5 weeks.

Fall '18 week begins	Coursework (usually due Friday)	F/S Week #	SS3 Week #	SS2 Week #
Sep 5 (3d)				
Sep 10	Topic 1 reading; first post	1	1	1
Sep 17	Topic 1 replies	2	2	2
Sep 23		3		
Oct 1	First "monthly" report	4	3	2
Oct 9 (4d)	Topic 2 reading; first post	5	4	2
Oct 15	Topic 2 replies	6	5	3
Oct 22		7		
Oct 29	Second "monthly" report	8	6	3

Fall '18 week begins	Coursework (usually due Friday)	F/S Week #	SS3 Week #	SS2 Week #
Nov 5	Topic 3 reading; first post	9	7	4
Nov 12 (4d)	Topic 3 replies	10	8	5
Nov 19 (2d)		11		
Nov 26	Third "monthly" report	12	9	5
Dec 3		13		
Dec 10 (2d)	Final report and Presentation due last day of class	Last Day	10	5
Final	No final exam in this course			

Generally, assignments are scheduled in Sakai to be due 11:55pm on Friday of the specified week. All work must be complete by the last day of class

Many of you will be doing the actual "practicum" work of the internship before the course begins. In this case, figure out how much time you have before you want to begin writing the third "monthly" report (at least a day before it is due, right? plus time to get it signed), and divide that into three roughly equal parts; these parts should ideally cover at least three weeks each. Adjust if needed to make sure you can submit each report on time. Write your monthly reports as you complete these periods of your internship and submit the reports when the assignments open in Sakai.

# Resources

Any resources you need for your internship work will be arranged with your sponsor/supervisor.

Where signatures are required on reports, a scanner that saves as PDF is ideal. You may also use a program such as Microsoft's Office Lens (a free iOS, Android, and Windows Phone app) to take a better-quality photograph with your smartphone. Electronic signatures embedded in a PDF may be used, if verifiable.

# Software

To access the course site, you'll need a standards-compliant, modern web browser. See <a href="http://hdwiki.uri.edu/index.php/Student\_Sakai">http://hdwiki.uri.edu/index.php/Student\_Sakai</a> for information that is only a few years out-of-date. You may need additional software to access PDFs, videos, etc. (None should require payment.)

Be certain you receive and read Sakai announcements!

#### Textbook

none

# Online readings

There are numerous articles and videos linked in the Sakai lessons for the discussion topics.

# Classroom Protocol ("Netiquette")

You will be interacting with your fellow students – peers and colleagues – in the topic assignments in Sakai. Constructive criticism is allowed, provided the emphasis is on "constructive." I expect you to conduct yourself courteously and professionally.

# Grading / Evaluation

Because of my temporary status, I cannot assign grades of "Incomplete" except in cases of real emergency, in which cases it must be approved by the department chairperson. There are a few situations related to summer enrollment where incompletes have been pre-approved. See Note for Summer Enrollment, below.

This course is graded S/U. You must submit satisfactory work in <u>ALL</u> FOUR categories:

- Monthly reports (one of the three may be missed)
- Discussion forums (you may fail to post and reply in only one of the topics)
  - If you are doing the alternate assignments in a low-enrollment session, all assignments must be done.
- Presentation (must be done)
- Final report (must be done and must be signed by supervisor)

### Attendance

Your satisfactory attendance at your internship is primarily a matter between you and your sponsor/employer. I expect that you will arrive at your worksite promptly each and every time you are scheduled. You should notify your supervisor immediately if you will be unable to do so. If you wish to take time off (e.g., for URI's Spring Break), you must arrange that with your sponsor ahead of time. Should you be absent from your internship for more than an occasional illness, this should be noted in your reports. You are expected to complete minimum number of hours of internship (13 weeks × 12 hours per week = 156 hours) regardless of absences.

Your "attendance" online in the forum discussions is required and we (I and the other CSC interns) look forward to your participation! See dates that will be posted in Sakai.

#### Remote work

While working remotely – i.e., from home – might be acceptable to your supervisor, you may not count any more than 15 hours spent working away from your regular internship site and coworkers toward the minimum hours for the internship. (This came up one semester when we had some really bad weather.) If you are working alongside your colleagues at a temporary worksite (trade show, customer/client site, or similar) that's fine.

#### Exams and quizzes

None

# Assignment instructions

Because many of you will be using this syllabus to prepare your work during your internship ahead of your enrollment in the course, I am putting assignment instructions here in the syllabus rather than leaving you to guess until the Sakai site is available.

#### "Monthly" Reports

If you are doing your internship before the session in which you enroll, divide your internship period roughly into quarters. Prepare "monthly" reports at the end of each of the first three quarters and submit them to Sakai once the site opens.

Each "month" (see schedule above), you will be asked to submit a report to document what you have accomplished and learned in the past month. You should also include relevant thoughts about things such as the software development processes used at your internship, the relevance of (or gaps in) your course work, your satisfaction with your work, challenges and frustrations, etc.

Please include your name and contact information, the name of the company, department or agency for which you are working, your supervisor's name, title and contact information.

I am your audience for these reports. Their purpose is to help ensure you are getting the experience you should be from your internship. If that's not happening, please contact me outside of the report; don't wait for me to read it there. I will work with you and your supervisor to see what can be done to help ensure a successful completion.

A dated signature (see below) from both you and your supervisor are expected. If you wish to include information in your reports but not share it with your supervisor, please let me know; we can skip her/his signature on the report and use a different means of verifying your progress in the internship.

#### Specifications

Each of these three reports should be at least one single-spaced page; longer is okay; two is typical. I'm not going to count words; I'm hoping to understand that your internship is meaningful and going well.

Your uploaded file must be a format I can read: PDF is preferred; Word is okay. Anything else, please save as a PDF.

**Tip:** When allowed, consider collecting screen captures or taking photographs that you will be able to use to illustrate your presentation. They don't need to be part of these reports, but it's going to be much harder to go back and get them later. When you're working on these reports is a great time to do this because you're already thinking about how to tell someone else what you're doing.

#### Due Dates

Your three "monthly" reports should ideally be written while you're doing the internship – even if you enroll in CSC 499 later – and should cover approximately the first, second, and third quarters of your internship. While specific dates will vary by year, a typical schedule is(:

- Fall Semester: reports due early in October, November, and December
- Spring Semester: reports due early in February, March, and April
- Summer Semester: reports due mid-June, early July, and mid-July (see Note for Summer Enrollment, below)

#### Forum discussions

Instructions for these will be in Sakai as they will be done during the semester in which you're enrolled.

There will be three discussion topics each semester. Discussion topics start with a series of readings and/or videos presented in Sakai and, usually, a small independent assignment. You will have about a week to complete the readings/videos/assignment and post a response to the forum as directed. Within a few days of the initial posting date, you will respond to two other student's posts.

#### Low-enrollment alternatives

It is possible (probable in the summer) that there will not be enough students to make the forum discussions meaningful. In this case, you will complete assignments based on the same topics, but with additional individual work.

#### Presentation

Your audience for your presentation is the other students doing Computer Science internships. Start with introductions of yourself, the organization at which you did your internship, and the project(s) in which you participated. Use your presentation to "show off" your own contributions to the organization with which you're working and the experience you gained. Try to avoid text-only presentations; collect screen captures and take photographs during your internship to use here (if allowed).

Presentations are typically prepared in Microsoft PowerPoint, Google Slides or similar software. The format of your presentation should be self-contained for distribution online to share with the other interns (and with me). For example, if you use PowerPoint, you could use its Record feature in the Slide Show tab and export a MP4 video. If the software you use doesn't have this capability, consider a free screen recorder such as Screencast-O-Matic.

Your presentation should take about 10-12 minutes. You should probably have around 20 slides for a presentation of this length. If you cannot or choose not to prepare a recording, you will need to include sufficient text description on your slides that it takes me that long to read aloud. (You'll probably need more slides to hold that much text.)

If there is sufficient interest (at least three students) and a mutually acceptable time on or before the last day of class, it may be possible for you to give your presentation live rather than make it self-sufficient. If this can work, it will be announced in Sakai.

If your work is classified or otherwise subject to disclosure restrictions, you must work with your supervisor, etc. to ensure that what you put in your presentation is appropriate for general release. You don't need to go into any great detail about the work, but you should be able to convey something about what made the internship a meaningful educational experience related to computer science.

# Final cumulative report

This report is like the monthly reports, but it will be more extensive and cover the entire semester of work. These are generally 4-6 (single-spaced) pages in length.

Your final report <u>must</u> be signed by your supervisor, indicating their assessment that you have successfully completed their expectations for the internship and that your report accurately describes your work. You may include the signature page as a separate image file (JPEG, PNG, PDF, or TIFF).

# Signatures

The signature of your supervisor on your interim and final reports serves as confirmation that you have conducted and completed your internship satisfactorily. In situations where discussion of your work is restricted (e.g., DoD security), your supervisor's signature may also serve as assurance to you that what you've written is okay to disclose. It is rare that I receive a physical, signed piece of paper. Electronic forms of signatures that have been useful include:

- **Best:** If your supervisor has Adobe Acrobat (or maybe some versions of the free Reader), an electronic signature on the copy you upload to Sakai works great.
- Good: You send your report document to your supervisor (typically as a PDF attachment) and your supervisor just emails it to me at <u>david h brown@uri.edu</u> with a short note confirming what you describe in the report. You still need to upload a copy to Sakai and I'll take care of adjusting the score to reflect my receipt of the signed one.
- Slightly awkward but gets the job done: Your supervisor signs a physical copy and you take a picture of the signed page ideally using a tool like Microsoft Office Lens (a free iOS/Android/Windows Phone app) to automatically straighten and crop the image. Upload the picture along with your PDF.
- **"A fax machine, how quaint:"**<sup>\*</sup> Your supervisor could fax a signed copy (to my attention) to the department photocopier at 401-874-4617.

Please don't upload <u>only</u> a scanned / photographed version; that's difficult to read.

<sup>\*</sup> Paraphrasing Scotty in Star Trek IV: <u>https://www.youtube.com/watch?v=v9kTVZiJ3Uc</u>. The original Mac had only been out a couple of years when that movie was written. Alexa, Siri, Cortana and Google's eponymous construct are definitely getting closer to the voice interface he was expecting.

# Summer enrollment special notes

Many summer internships extend through August. However, the Summer Session ends in July and work must be submitted by the end of the summer term for me to record your completion of the course in that term. There are two options to consider:

- If you **will** have completed at least 150 hours of your internship by the end of the Summer Session **and** you feel ready, you may write your reports and prepare your presentation based on the work you've done so far. Submit all your work by the end of the summer session and I will be able to enter your S/U grade on time.
- If you will not have completed at least 150 hours of your internship or if you feel that you need more time, I can enter an Incomplete for your grade. Please indicate this option in the assignment submission comments in Sakai.
  I expect that you will be able to submit your completed work before the Fall semester begins at which point I can begin the process of changing your Incomplete to Satisfactory.

# General University of Rhode Island Policy

The following statements of URI policy are recommended for inclusion in all syllabi.

## Illness Due to Flu

I'm not sure this is too relevant in an online course; check with your internship sponsor and maybe carefully wipe your keyboardand pointing device with a cloth moistened with hand sanitizer occasionally.

The nation is experiencing widespread influenza-like illness. If any of us develop flu-like symptoms, we are being advised to stay home until the fever has subsided for 24 hours. So, if you exhibit such symptoms, please do not come to class. Notify me at <u>david h brown@uri.edu</u> of your status, and we will communicate through the medium we have established for the class. We will work together to ensure that course instruction and work is completed for the semester.

The Centers for Disease Control and Prevention have posted simple methods to avoid transmission of illness. These include: covering your mouth and nose with tissue when coughing or sneezing; frequent washing or sanitizing your hands; avoiding touching your eyes, nose, and mouth; and staying home when you are sick. For more information please view <a href="https://www.cdc.gov/flu or flu.gov">www.cdc.gov/flu or flu.gov</a>. URI Health Services web page, <a href="https://www.health.uri.edu">www.health.uri.edu</a>, will carry advice and local updates.

# Academic Honesty

Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity. The following are examples of academic dishonesty.

- Using material, directly or paraphrasing, from published sources (print or electronic) without appropriate citation
- Claiming disproportionate credit for work not done independently
- Unauthorized possession [of] or access to exams
- Unauthorized communication during exams
- Unauthorized use of another's work or preparing work for another student
- Taking an exam for another student

- Altering or attempting to alter grades
- The use of notes or electronic devices to gain an unauthorized advantage during exams
- Fabricating or falsifying facts, data or references
- Facilitating or aiding another's academic dishonesty
- Submitting the same paper for more than one course without prior approval from the instructors.

#### Disability

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with Disability Services for Students Office at 330 Memorial Union, 401-874-2098 (<u>http://www.uri.edu/disability/dss/</u>) or 239 Shepard Building, Feinstein Providence Campus, 401-277-5221.

#### Academic Enhancement Center

This is a challenging course. Success requires that you keep pace with the work, understand course concepts, and study effectively. The Academic Enhancement Center (http://www.uri.edu/aec/) is a great place to do this. At the AEC you can work alone or in groups, and tutors and professional learning specialists are available to help you to learn, manage your time and work, and study well. On the Kingston campus, it's open Monday through Thursday from 10 a.m. to 9 p.m. and Fridays until 1 p.m. All services are free (the coffee is free as well!), and no appointment is needed. You can call for complete information at 874-2367, or just stop by the center on the fourth floor of Roosevelt Hall. In Providence, the Academic Skills Center (ASC) is at 239 Shepard Building, (401) 277-5221. Hours are posted each semester at <a href="http://www.uri.edu/prov/studentresources/help/academicskills.html">http://www.uri.edu/prov/studentresources/help/academicskills.html</a>. In addition, the Saturday Skills for Success program offers workshops and tutoring from 10 am -1pm during fall and spring semesters.

#### Early Alert Services

Early Alert Services (<u>http://web.uri.edu/earlyalert/</u>) are part of New Student Programs, and are intended to help students when an intervention of support is needed. In collaboration with other campus support services, we reach out to students to provide individual guidance and help create strategies to address whatever issues may be of concern. Students may need only one meeting with our staff, or may need continuing support. Either way, we are here to help.

Issues that Early Alert Services supports include: Academic Performance, Class Attendance, Lack of Engagement in the Classroom, Connecting with Campus Resources, Family Concerns, Financial Concerns, Lack of Campus Involvement/ Social Isolation, Time Management/Procrastination.

Faculty, staff, peers, and family members play a vital role in student success. As you notice students struggling academically or personally, it is important to refer these students to Early Alert for assistance. Students are welcomed and encouraged to contact the office directly as well. Referrals may be done via referral form, telephone, email, or in person. Referrals to Early Alert may be kept anonymous.