

Department Clarification “Framework”

Department: _____ **Computer Science**
Clarifications formally approved on: Final as of 12/28/2022

Departmental clarifications:

1.0 Instruction

Core Criterion: A faculty member must clearly be contributing to the instructional mission by demonstrating proficiency and breadth in instructional quality and capacity.

Clarifications listed below:

1.2 Overall Criterion Considerations & Requirements

1.2 (A) A faculty member must clearly be contributing to the instructional mission

1.2 (B) Instructional effectiveness

1.2 (C) Student assessment of instruction

1.3 Factors to consider in terms of “effort “

Very often, computer science courses require faculty to develop programs, simulations, and other instructional aids to ensure the course content is current (as textbooks often lag behind) and to provide practical experience. Additionally, some courses culminate in exhibitions (e.g. Game Expo) where students publicly showcase their work. Where present, these activities reflect substantive time and effort into course development and can be an indicator of instructional quality.

The department supports course coordination efforts that produce high quality, efficient approaches to delivery, such as collaborative efforts on developing appropriate resources, division of labor around topics, and frequent meetings and collaboration to ensure quality and consistency support a standard for learning and achievement, especially in first and second-year courses. In upper-level courses where coordination is less emphasized, leadership toward ensuring a foundational set of approaches is appreciated as may be exemplified through ABET course review process and led proactively through departmental channels.

1.4 Factors to consider in “quality”

Upper-division courses include links to cutting edge research and innovation to ensure students are knowledgeable about contemporary challenges and opportunities in the field.

In upper-level courses, existing resources (e.g. textbooks) tend to be conceptual in nature. Faculty may find it necessary to produce learning materials that reflect the application of this knowledge.

1.5 Further Criterion Considerations

There are many emerging areas within compute science. Such as computational biology, AR, Autonomous Systems, intelligent applications, and cross-disciplinary fields. Courses may be developed from these emerging fields, where textbooks and teaching material do not yet exist.

2.0 Research or Other Creative/Scholarly Activities

Core Criterion: a faculty member has a **unique and scholarly expertise in their field** and has activity that **aligns with this professional direction.**

Mainstream research in computer science is books (textbooks), journal articles, conference proceedings and presentations, associated with prestigious professional societies.

Faculty often publish in a mix of high-impact, referred journals and conference proceedings. Within ACM, IEEE and other quality of outlet varies, so it is important the faculty member provide context around where they've produced and its value.

2.2 Further Criterion Considerations

Workshops, tutorials, and training delivered at disciplinary/professional meetings or similar venues also represent an important professional contribution and is typically an example of recognized expertise.

2.3 Proposal and grant application

Teaching loads for many faculty includes multiple different preparations in a semester and it can be challenging to write multiple proposals in a year.

3.0 Service: a faculty member is contributing to their department and profession in a positive way.

3.2 Criterion Considerations

- Faculty should specify all approved consulting work that adds value to the program and the university, facilitating partnerships, student internships, donations, or other funding.
- Faculty should specify all effort that promote the university, such as public events, expos, presentations, media interviews, and all other outreach that builds the universities prestige.
- The University has, at times, turned to faculty expertise to assist in business operations strategies and development of tools (e.g. Covid-19 support). This type of work demonstrates a high degree of value and contribution to the University and University community.
- While advising is an expected function for all faculty, demonstrated effort that goes beyond the minimum expectation in advising and registration advising support are notable.

3.3 Special Consideration of Administration Contribution

4.0 Overall recommendation: criteria notes, appropriate to rank and reappointment and/or reappointment: strong, ongoing contribution to the University, ability to perform their full suite of duties with a high degree of quality and independence by demonstrating accomplishment in teaching, appropriate trajectory in research, and service that positively advances the University, department, and program