

1. Explain briefly and clearly the proposed improvement.

This proposed improvement is to change the catalog description to "This course covers basic AI techniques and concepts including rule-based systems, intelligent search, heuristics, knowledge representation and reasoning, predicate logic and pattern recognition. It introduces several AI application areas such as learning, vision, natural language processing, games, and expert systems."

A minimum grade of C in the prerequisite course.

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)

With the rapid development in this field, the topics and application areas included in the current description, "Provides an overview of artificial intelligence including basic A.I. techniques and concepts, e.g., production systems, heuristic searching techniques, knowledge representation, predicate calculus, and pattern recognition. Introduces A.I. application areas such as game playing, expert systems, vision, natural language processing, and learning", have become outdated. The new description addresses this issue by listing the main topics and application areas in the current teaching.

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

None.

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

The perspective students will have a better understanding of what they expect to learn from the course.

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.

No change.

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?

No change.

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)

None.

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.) N/A

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program. N/A

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities. N/A

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from

Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section. N/A

Current Catalog Description

CS 5820 - Artificial Intelligence

Provides an overview of artificial intelligence including basic A.I. techniques and concepts, e.g., production systems, heuristic searching techniques, knowledge representation, predicate calculus, and pattern recognition. Introduces A.I. application areas such as game playing, expert systems, vision, natural language processing, and learning.

Prerequisites/Corequisites: Prerequisite: CS 3310.

Credits: 3 hrs.

Notes: Open to Upperclass and Graduate Students. Undergraduates with junior or senior status who have met the specific course Prerequisites or have the permission of the instructor may enroll in 5000-level courses.

Proposed Catalog Description

CS 5820 - Artificial Intelligence

This course covers basic AI techniques and concepts including rule-based systems, intelligent search, heuristics, knowledge representation and reasoning, predicate logic and pattern recognition. It introduces several AI application areas such as learning, vision, natural language processing, games, and expert systems.

Prerequisites/Corequisites: Prerequisite: CS 3310.

Credits: 3 hrs.

Notes: Open to Upperclass and Graduate Students. Undergraduates with junior or senior status who have met the specific course Prerequisites or have the permission of the instructor may enroll in 5000-level courses.