Expedited Course Change Cover Sheet (July 2012)

UNIVERSITY OF MARY WASHINGTON – EXPEDITED COURSE CHANGE PROPOSAL
Submit this form electronically, beginning with the first required level of review (department or college level). Each level of review passes the form and any attachments to the next level when the action is approved.

Submitted by: David Toth  Date Prepared: 9/26/12

Department/Discipline and Course Number: Computer Science – CPSC 425

Course Title: Parallel Processing

Type of change (check all applicable):
Course Number*  Title  X  Credits  Description  X  Prerequisites  X  Deletion

*This course number must be approved by the Office of the Registrar before the proposal is submitted.

Effective Date: FALL Semester, Year 2013

<table>
<thead>
<tr>
<th>Current Catalog Entry</th>
<th>Proposed Catalog Entry</th>
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<tr>
<td>CPSC 425 Parallel Processing</td>
<td>CPSC 425 Parallel Computing</td>
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<tr>
<td>Prerequisite: Computer Science 305. Introduces massive parallelism, shared-memory strategies, and message passing approaches. Other topics are synchronization, parallel algorithm development, performance measurements, degradation, granularity, interconnection networks, and processor communication strategies. Includes study of multi-computer topologies (e.g. rings, meshes, tori, and hypercubes) and topological embeddings. Programming tools may include Multi-Pascal, MPI, and C-Linda.</td>
<td>Prerequisite: Computer Science 230. This course provides an introduction to parallel computing, covering topics including parallel architectures, programming techniques and libraries, the study of existing parallel computing systems, and performance analysis. Students will use a variety of hardware to explore current libraries and methods used for parallel programming and complete a project using the material they learn.</td>
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JUSTIFICATION (including impact on majors, minors, concentrations, and general education courses within the University curriculum; attach additional pages if required)
The course title, content, and description need to be updated to bring them up to current standards in the field. It has not been taught at UMW for about 10 years and the course title and description have not been kept current. Lowering the prerequisite allows more students to take this course early during the major/minor, which has been deemed very important by the parallel computing community. These changes should not impact majors, minors, concentrations, or general education courses.

TRANSITION PLAN (describe how will students who are in Catalogs where the course is required for a major be accommodated; attach additional pages if required)
The course was not required for a major or minor. No accommodations are necessary.

Approvals
Department Chair  Jennifer Polack-Wahl  Date: 10/31/12
Expedited course changes are posted for a 10-class day comment period. If no comments are raised during that time, the proposal becomes final. All expedited proposals approved in this way will be noted on the UCC web site.

If comments are raised, the proposal may be reviewed by the UCC and then approved or it may be returned to the CCC for additional deliberation (as required).