4-2-2004

SR-03-04-36 CC

Marshall University

CURRICULUM COMMITTEE RECOMMENDATION

SR-03-04-36 CC

Recommends approval of the listed **COURSE CHANGES** for the following colleges and/or schools:

❖ COLLEGE OF INFORMATION TECHNOLOGY & ENGINEERING

ENGR 107 Introduction to Engineering
Change in content: **FROM:** see catalog description below. **TO:** see catalog description below.
Rationale: see below.
-AND-
Change in credit hours: **FROM:** 2 **TO:** 3
Rationale: The additional credit is justified by the additional material related to engineering graphics and computer-aided design and drafting.
-AND-
Change in catalog description: **FROM:** Introduction to Engineering 2 hrs. I – An introduction to the engineering profession; effective use of electronic calculators; significant figures and dimensional analysis; proper format for engineering computations; typical engineering problems and computations. 2 lec. (PR or CR: MTH 122 and MTH 130 or MTH 132) **TO:** Introduction to Engineering 3 hrs. I, II – An introduction to the engineering profession and engineering disciplines; effective problem solving techniques; the engineering design process and team projects; introduction to engineering graphics and computer-aided design and drafting. 2 lec-2 lab. (PR or CR: MTH 122 and MTH 130 or MTH 132 or higher)
Rationale: These changes are consistent with the requirement of similar freshman-level courses required by other engineering programs and the trend to eliminate engineering graphics as a stand-alone course.

ENGR 204 Introduction to Digital Systems
Change in content: **FROM:** see catalog description below. **TO:** see catalog description below.
Rationale: see below.
-AND-
Change in credit hours: **FROM:** 3 **TO:** 4
Rationale: The additional credit is justified by the addition of a laboratory component.
-AND-
Change in catalog description: **FROM:** Introduction to Digital Systems 3 hrs. II – Digital components and systems; Boolean switching algebra; the analysis and design of combinational and sequential circuits; introduction to computer architecture. 3 lec. (PR: ENGR 201) **TO:** Introduction to Digital Systems 4 hrs. II – Number systems, digital components and systems; Boolean switching algebra; the analysis and design of combinational and sequential circuits; introduction to computer architecture. Laboratory exercises to reinforce lecture topics. 3 lec. – 2 lab. (PR: ENGR 201 or consent)
Rationale: The additional of a laboratory component is consistent with the requirements at other schools to which students transfer.

❖ COLLEGE OF LIBERAL ARTS

ENG 302 Research-Intensive Writing
Change in title: **TO:** Research-Based Composition
Rationale: To clarify course content and purpose. ENG 302 serves as an upper-class version of the course ENG 102 required in Marshall's composition sequence, and students sometimes mistakenly enroll in it as if it were an elective that would fulfill 300-level general education requirements in literature or advanced writing.

GEO 101 Physical Geography
Change in credit hours: **FROM:** 4 **TO:** 3
Rationale: To being us in line with all other science courses on campus – a 3 hour lecture with a co-requisite 1 hour lab. This course change is accompanied by a 1-hour lab course addition.
-AND-
Change in catalog description: **FROM:** (no text provided) **TO:** Add "co-requisite GEO 101L"
Rationale: None given.

GEO 429 Fundamentals of Geographic Information Systems (GIS)
Change in title: **TO:** Fundamentals of GIS – Vector Analysis
Rationale: Better reflects course content and GIS curriculum in Geography.
-AND-
Change in content: **FROM:** Cartographic principles and introduction to GIS analysis. **TO:** GIS vector analysis.
Rationale: Old content, cartographic principles and introduction to GIS analysis, will be covered in new course GEO 301; new content, GIS vector analysis, represents changes in Geography curriculum in response to student need for more GIS coursework and more advanced GIS analysis.
-And-
Change in catalog description: **FROM:** Basic geodesy and application of cartographic principles to automated mapping and GIS. **TO:** Introduction to GIS vector analysis, beginning with the vector data model, and including buffering, overlay analysis, geocoding, and network analysis. Prerequisite: GEO 301 or permission.
Rationale: Reflects change in course content.

GEO 430 Intermediate Geographic Information Systems (GIS)
Change in title: **TO:** Intermediate GIS – Raster Analysis
Rationale: Better reflects course content and GIS curriculum in Geography.
-AND-
Change in content: **FROM:** GIS methods, data acquisition, and vector analysis. **TO:** GIS raster analysis.
Rationale: Old content, GIS methods, data acquisition, and introduction to vector analysis, will be covered in courses GEO 301 and GEO 429; new content, GIS raster analysis, represents changes in Geography curriculum in response to student need for more GIS coursework and more advanced GIS analysis.
-AND-

Change in catalog description: **FROM:** Data collection and input from readily available sources, creation of custom data using GPS, and advanced spatial analysis using GIS. **TO:** GIS raster analysis, including local, neighborhood, and zonal operations, terrain analysis, building raster databases, distance modeling, and surface interpolation. Prerequisite: GEO 301 or GEO 429 or permission.
Rationale: Reflects change in course content.

FACULTY SENATE PRESIDENT:

APPROVED
BY SENATE: Larry W. Stickler DATE: 4/2/2004

DISAPPROVED
BY SENATE: _____ DATE: _____

UNIVERSITY PRESIDENT:

APPROVED: _____ DATE: 4/4/04

DISAPPROVED: _____ DATE: _____

COMMENTS: _____

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