SCIENCE TECH ENGINEERING MATH (STEM)

STEM 1505 Safety Principles in the STEM College 1 s.h.
Topics pertaining to safety in STEM College laboratories with applications to industry, including chemical safety, electrical safety, planning for emergencies, etc.

STEM 1513 Studies in STEM Connectivity 3 s.h.
Develops and studies connections between mathematical concepts and the empirical sciences, and applies these connections to engineering and technology.
Prereq.: placement out of RSS 1510A and RSS 1510B (no reading placement) and concurrent registration in MATH 1510 and/or MATH 1511.

STEM 1520 STEM First Year Orientation 2 s.h.
The course is designed to enhance the transition and adjustment of first-year students in the College of Science, Technology, Engineering, and Mathematics by exploring key concepts and issues that support student motivation and academic persistence.

STEM 1530 Sustainable Design in Practice 3 s.h.
Cross-listed as ART 1530. Introduction to the visual and organizational components of two and three dimensional design, development of ideas and creative critical thinking as applied to tangible form. The course leads to an understanding of design as a verb and encourages inventiveness and collaboration to generate ideas.
Gen Ed: Environmental Sustainability, Social and Personal Awareness.

STEM 1530H Honors Sustainable Design in Practice 3 s.h.
Cross-listed as ART 1530. Introduction to the visual and organizational components of two and three dimensional design, development of ideas and creative critical thinking as applied to tangible form. The course leads to an understanding of design as a verb and encourages inventiveness and collaboration to generate ideas.
Gen Ed: Environmental Sustainability, Social and Personal Awareness.

STEM 1551 STEM Careers 1 s.h.
An introduction to the career opportunities available in the different STEM majors. Designed to help students choose a STEM major field of study and understand the relationship between science and technology. To enhance student success. One hour lecture per week. Grading is ABC/NC.

STEM 2601H Honors BSMD Seminar 2 s.h.
An interdisciplinary course dealing with topics appropriate to students in the BSMD program. The subjects include, but are not limited to, MCAT preparation, study skills appropriate for the accelerated curriculum, the organization and function of the university, critical thinking, current events, etc.
Prereq.: Acceptance into BSMD program.

STEM 2625 Natural Gas and Water Resources Seminar 1 s.h.
Guest lecture forum course designed to provide students with exposure to a broad range of topics and current research relevant to the petroleum industry and water resource issues. Course may be repeated.
Prereq.: GEOL 2620 (or concurrent).

STEM 3700 Human Values in Medicine 1-7 s.h.
A behavioral science and humanities perspective on individual and social issues which affect medical care delivery. In addition to classes, seminars, and workshops, it may include field projects, participation in health-related investigations and presentations, and personal development programs. Credit toward fulfillment of the area requirement will be determined by the dean of the College of Arts and Sciences and will be based upon the selection of courses. May be repeated once. For current students.
Prereq.: PSYC 1560 and PHIL 2600 or consent of dean.

STEM 3789 STEM Professional Practice 1-4 s.h.
Apply theory in professional practice experience overseen by appropriate working professional for employment at approved employer. Students see faculty advisor, submit professional practice proposal for approval and write final project paper. May be repeated for a maximum of 8 s.h.
Prereq.: at least sophomore standing, 2.00 GPA in STEM program, and special approval of the STEM Professional Practice Director in consultation with student's department chair.

STEM 3790 STEM Internship Experience 1-4 s.h.
Apply theory in professional practice experience overseen by working professional and STEM faculty mentor for part-time assignment at approved employer. Students see Coordinator of STEM Student Professional Services (SSPS) and faculty advisor, receive professional practice training, submit assignment proposal for approval, file weekly work logs for faculty mentor review, make public presentation, and write final project paper. May be repeated.
Prereq.: at least sophomore standing, 2.00 GPA in STEM program, and approval by Coordinator of SSPS in consultation with student’s department chair.

STEM 3791 STEM Cooperative Education Experience 0 s.h.
Apply theory in professional practice experience overseen by working professional and College of STEM faculty mentor for 40 hours/week assignment at approved employer. Students see Coordinator of STEM Student Professional Services (SSPS) and faculty advisor, receive professional practice training, submit assignment proposal for approval, file weekly work logs for faculty mentor review, make public presentation, and write final project paper. May be repeated.
Prereq.: at least sophomore standing, 2.00 GPA in STEM program, and approval by the Coordinator of SSPS in consultation with student’s department chair.

STEM 4809 Primary Care Medical Practices 2 s.h.
Combination of seminars, workshops, and field experiences, conducted by YSU faculty, regional physicians, nurse practitioners, and physician assistants, which expose YSU-BaccMed students to primary care medical practice among underserved rural and urban locations/populations.
Prereq.: Admission to YSU-BaccMed program, approval of BaccMed advising and/or faculty coordinators, junior standing.

STEM 4890 STEM Internship 1-4 s.h.
Integrate theory and practice jointly supervised by working professional and STEM faculty mentor for part-time assignment at approved employer. Students see Coordinator of STEM Student Professional Services (SSPS) and faculty advisor, receive professional practice training, submit internship proposal, receive internship offer from approved employer, file weekly work logs for faculty mentor review, make public presentation, and write final project paper. May be repeated.
Prereq.: junior or senior standing, 3.00 GPA in STEM program, 2.75 GPA overall, and special approval of the Coordinator of SSPS in consultation with student’s department chair.

STEM 4891 STEM Cooperative Education Assignment 0 s.h.
Integrate theory and practice jointly supervised by working professional and College of STEM faculty mentor for 40 hours/week assignment at approved employer. Students see Coordinator of STEM Student Professional Services (SSPS) and faculty advisor, receive professional practice training, submit co-op proposal, receive co-op offer from approved employer, file weekly work logs for faculty mentor review, make public presentation, and write final project paper. May be repeated.
Prereq.: junior or senior standing, 3.00 GPA in a STEM program, 2.75 GPA overall, and approval of Coordinator of SSPS in consultation with student’s department chair.

STEM 4895 Senior Thesis 1-3 s.h.
Faculty-directed research for students pursuing practical research experience in a STEM-related discipline. May be repeated for up to 3 s.h.
Prereq.: Junior status; submission of an approved thesis proposal; permission of the STEM dean.