

## ISU PARAMEDIC COURSE DESCRIPTIONS 2021-22

Legend: Column 2=Classroom hours  
Column 3=Lab/Clinical hours  
Column 4=Credits  
Column 5=Day of the week

Catalog Description: All Biology and Health courses must be completed with a “C” or better in each course for the student to remain in the program. Students must obtain a grade of “B-“ (80%) in all Paramedic classes (unless otherwise specified on individual course syllabus).

**Preprofessional Requirements (Prior to program entrance):** Introduction to Anatomy & Physiology HO 0111 (4 credits) or equivalent. Medical Terminology HCA/HE 2210 or HO 0106 (2 credits) or equivalent. BIOL 3301/3301L and BIOL 3302/3302L (8 credits total) or equivalent is acceptable in lieu of HO 0111.

**Other Entrance Requirements:** Current state EMT-Basic or EMT-Advanced certification, Current AHA Healthcare Provider CPR

General education requirements for the Associate of Science Paramedic Science degree (36 credits minimum): <http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/>

### Semester 1 (Fall) **Note: Classes meet Tuesdays and Thursdays. Students will attend lab on either Wednesdays or Fridays.**

PARM 2211	48	0	3	T	8:00 am – 11:00 am	Basic ECG Interpretation	PREREQ: Acceptance in Paramedic program or by permission of instructor.	Introductory ECG course. Anatomy and physiology of the conduction system of the heart, the electrical system, electrocardiography, abnormal ECG patterns and distinguishing between life-threatening & non-life-threatening dysrhythmias. Introduction to dysrhythmia management. PREREQ: Acceptance into Paramedic program or permission of instructor. F
PARM 2212	48	0	3	T	12:00 pm – 3:00 pm	Paramedic Pharmacology	COREQ: PARM 2213, PARM 2213L, and PARM 2217L.	Fundamental, drug-class oriented course that focuses on the pharmacodynamics and pharmacokinetics of drug therapy, drug calculations, and the pharmaceutical interventions of common EMS medications. Roles & responsibilities and ethical considerations of drug administration. COREQ: PARM 2213, PARM 2213L and PARM 2217L. Acceptance into Paramedic program or permission of instructor. F
PARM 2213	32	0	2	T	3:30 pm - 5:30 pm	Paramedic Fundamentals	COREQ: PARM 2212, PARM 2213L, and PARM 2217L.	Basic patient assessment concepts, review of basic airway management & introduction to advanced airway management/ventilation, intravenous skills & medication administration via enteral & parenteral routes. Acceptance in Paramedic program or permission of instructor. F
PARM 2213L	0	45	1	W or F	9:00- am 12:00 pm	Paramedic Fundamentals Lab	COREQ: PARM 2212, PARM 2213, and PARM 2217.	Focus on BLS & ALS airway management, as well as intravenous cannulation, medication administration and drug calculations. Graded P/NP. COREQ: PARM 2212, PARM 2213, and PARM 2217L. Acceptance in Paramedic program or permission of instructor. F
PARM 2214	48	0	3	R	9:00 am – 12:00 pm	Paramedic Pathophysiology	PREREQ: Acceptance into Paramedic program or permission of instructor.	Correlative approach to pathophysiology, applying both physical assessment skills and basic cellular understanding to the various disease entities and trauma processes encountered in emergency medicine. Acceptance into Paramedic program or permission of instructor. F
PARM 2215	48	0	3	R	1:00 pm – 4:00 pm	Intro to Paramedic Medicine	PREREQ: Acceptance into Paramedic program or permission of instructor.	Interactive presentation and discussion of foundational aspects of EMS within the healthcare system. Includes ethics, medical-legal issues, roles & responsibilities of the Paramedic, healthcare policy and the role of research within EMS. PREREQ: Acceptance into Paramedic program or permission of instructor. F
PARM 2217L	0	45	1	W or F	1:00 pm – 4:00 pm	Paramedic Integration I Lab	COREQ: PARM 2212, PARM 2213 and PARM 2213L.	Designed to teach, integrate and complement content from concurrent Paramedic lecture courses, as well as reinforce of assessment & therapeutic communication techniques, while reviewing & assessing skills learned from concurrent & prior EMS coursework. COREQ: PARM 2212, PARM 2213 and PARM 2213L. Graded P/NP. Acceptance in Paramedic program or permission of instructor. F

**224 90 16**

**Semester 2 (Spring) Note: Classes meet Tuesdays and Thursdays. Students will attend lab on either Wednesdays or Fridays. Approximately 6 clinical rotations, often during the weekend.**

PARM 2221	48	0	3	T	8:00 am - 11:00 am	Medical Emergencies	COREQ: 2221L. PREREQ: PARM 2211, PARM 2212, PARM 2213, PARM 2213L, PARM 2215.	Recognition, assessment and treatment of medical diseases involving cardiac, respiratory, neurologic, endocrine, abdominal, hematologic, behavioral disorders, toxicology and renal systems. Includes ACLS. COREQ: 2221L. PREREQ: PARM 2211, PARM 2212, PARM 2213, PARM 2213L, and PARM 2215. Acceptance into Paramedic program or permission of instructor. S
PARM 2221L	0	45	1	W or F	9:00 am – 12:00 pm	Medical Emergencies Lab	COREQ: PARM 2221	Reinforces and integrates the recognition and treatment of medical diseases as taught in PARM 2221. Skill modalities shall include pharmacological intervention, ECG interpretation, basic and advanced airway interventions, patient assessment, patient management and decision-making. Graded P/NP. COREQ: PARM 2221. Acceptance into Paramedic program or permission of instructor. S
PARM 2222	48	0	2	T	12:00 pm – 3:00 pm	Trauma Care	PREREQ: PARM 2213, PARM 2213L, and PARM 2214.	A comprehensive approach to assessment, injury recognition and management of the trauma patient. An introduction of trauma systems, injury prevention, kinematics and aeromedical use and integration. Includes PHTLS. PREREQ: PARM 2213, PARM 2213L, PARM 2214 and acceptance into Paramedic program or permission of instructor. S
PARM 2223	32	24	2	R	1:00 pm – 4:00 pm	Advanced Emergency Care	PREREQ: PARM 2213, PARM 2213L or permission of instructor.	Combined lecture/lab course focuses on the instruction and integration of skills associated with advanced airway management, renal dialysis, venous access & pharmacological delivery systems. PREREQ: PARM 2213, PARM 2213L and acceptance into Paramedic program or permission of instructor. S
PARM 2224	48	0	3	R	9:00 am – 12:00 pm	Special Populations	PREREQ: Acceptance in Paramedic program or permission of instructor.	A comprehensive approach of obstetrics and gynecology, including the pediatric patient from birth to adolescence. Includes introduction to gerontology-to address issues such as lifespan development, cultural diversity, polypharmacy, pathological changes and treatment variations associated with an aging population. Includes PALS. COREQ: PARM 2224L. PREREQ: Acceptance into Paramedic program or permission of instructor. S
PARM 2224L		45	1	W or F	1:00 pm- 4:00 pm	Special Populations Lab	COREQ: PARM 2224	Reinforces and integrates the recognition and treatment of medical diseases as taught in PARM 2224. Skill modalities shall include pharmacological intervention, ECG interpretation, basic and advanced airway interventions, patient assessment, pt. management and decision-making. COREQ: PARM 2224. Graded P/NP. S
PARM 2225	32	0	2	T	3:30 pm – 5:30 pm	Advanced ECG Interpretation	COREQ: PARM 2211 or permission of instructor.	An introductory 12-lead ECG interpretation course. Topics will include intraventricular conduction delays, myocardial ischemia, injury and infarction, axis deviation, syndrome bundle branch blocks, ectopy and advanced dysrhythmia interpretation. COREQ: PARM 2211 or permission of instructor. S
PARM 2229	0	50	1		TBD	Paramedic Clinical Practicum I	PREREQ: Acceptance in program or by permission of instructor.	Student rotations through various departments in hospitals, performing paramedic skills under the direct supervision of the clinical instructor &/or assigned clinical preceptors. Skills performed include those learned in previous coursework. Graded P/NP. S

224 164 15

**Semester 3 (Summer) Note: Class meets Wednesdays only; clinical days vary throughout summer semester.**

PARM 2231	20	16	2	W	9:30 am – 11:30 pm	Rescue-Operations	PREREQ: Acceptance in Paramedic program or by permission of instructor.	An introductory course to include: ambulance operations, rescue and extrication techniques, incident command and hazardous materials. The accompanying laboratory portion may be taught in seminar format as necessary. PREREQ: Acceptance into Paramedic program or permission of instructor. Su
-----------	----	----	---	---	--------------------	-------------------	---	---

						Rescue-Operations (Lab component)		<b>NOTE: For program use only, do not include in catalog description.</b> The integrated laboratory component of PARM 2231 that focuses on the skills associated with Rescue Operations of the Paramedic, including: vehicle extrication, safety, triage & ICS. Lab may be taught in seminar format as necessary. Su
PARM 2237L	0	45	1	W	1:00 pm – 4:00 pm	Paramedic Integration II Lab	PREREQ: PARM 2217, PARM 2221, PARM 2222 and PARM 2223 or permission of instructor.	Designed to teach, integrate and complement content from previous Paramedic lecture and laboratory courses. Previously learned material shall be reviewed, reinforced and evaluated as necessary to maintain competency. Graded P/NP. PREREQ: PARM 2217, PARM 2221, PARM 2222, and PARM 2223. Su
PARM 2239	0	350	3		TBD	Paramedic Clinical Practicum II	PREREQ: PARM 2229, and acceptance into Paramedic program or permission of instructor.	Supports the didactic elements of the Paramedic course. Rotations at various clinical settings including: ED, OR, ICU/CCU, Crisis Intervention/Psychiatry and EMS ride-alongs with EMS/Fire agencies. In addition, students shall complete an ACLS Provider course. Other clinical site rotations may be added or substituted as determined by the program. PREREQ: PARM 2229, and acceptance into Paramedic program or permission of instructor. Graded P/NP. Su

20 311 6

**Semester 4 (Fall) Note: Field internship rides are typically 2-3 days per week. No regular class meetings on campus.**

PARM 2249	0	480	6	T B D	TBD	Paramedic Field Practicum	PREREQ: PARM 2231, PARM 2237, PARM 2239.	Capstone course for the student to apply/demonstrate the knowledge/skills learned in the program on an EMS unit. Students is under the direct supervision of an approved preceptor and is required to demonstrate competence as a team leader performing patient assessment skills & formulating a proper treatment plan for situations encountered. Mandatory benchmarks are required. PREREQ: PARM 2231, PARM 2237 and PARM 2239. Graded P/NP. F
-----------	---	-----	---	-------------	-----	---------------------------	--	--

0 480 6

**PROGRAM TOTALS**

Credits	Lecture Hours	Lab Hours	Clinical Hours	Internship Hours	Total Hours
43	468	241	300	480	1489