Subject Description Form

<table>
<tr><td>Subject Code</td><td>BME5342</td></tr>
<tr><td>Subject Title</td><td>Sports Injury Prevention and Health Management</td></tr>
<tr><td>Credit Value</td><td>3</td></tr>
<tr><td>Level</td><td>5</td></tr>
<tr><td>Pre-requisite/
Co-requisite/
Exclusion</td><td>Nil</td></tr>
<tr><td>Objectives</td><td>The subject aims to:
1. provide students with the knowledge of principles and practices involved in sports injury prevention and health management;
2. foster a creative and innovative mindset that enables students to apply this knowledge to develop effective strategies and solutions in both academic and industrial settings;
3. encourage interdisciplinary collaboration, integrating skills and principles from sports science, technology, engineering, and healthcare to promote holistic health and performance enhancement.</td></tr>
<tr><td>Intended Learning Outcomes</td><td>Upon completion of the subject, students will be able to:
a. Understand the fundamentals of sports injury prevention and health management.
b. Comprehend the basic operations involved in monitoring, assessing, and managing sports-related injuries and health conditions.
c. Demonstrate practical skills in the design, development, and application of technologies and strategies for sports injury prevention and health management.</td></tr>
<tr><td>Contribution to Programme Outcomes (Refer to Part I Section 2)</td><td>Program Learning Outcome (a) Acquire and apply advanced levels of knowledge and skills in the sports technology and management discipline. (Teach, Practice, Measure)
Programme Learning Outcome (c) Demonstrate a higher level of professional competence to cope with the rapid changes in practice in the sports technology and management discipline. (Teach, Practice)
Programme Learning Outcome (d) Develop research skills that will help incorporate evidence-based practice in the delivery of sports services and industry. (Teach, Practice, Measure)</td></tr>
<tr><td>Subject Synopsis/ Indicative Syllabus</td><td>The subject begins with an introduction to the fundamental principles of sports injuries, including their causes, risk factors, and common types across various sports. Students will explore preventive measures, such as proper training techniques, conditioning programs, and the use of protective equipment. The syllabus covers health management practices, including injury assessment, treatment protocols, and rehabilitation strategies. Emphasis will be placed on the integration of technology in injury prevention and health management, such as wearable devices, monitoring systems, and data analytics. Practical sessions will enable students to apply these concepts through hands-on experience with injury assessment tools and rehabilitation equipment. The course also addresses contemporary issues and trends in the field, encouraging students to critically evaluate current practices and explore innovative solutions.</td></tr>
<tr><td>Teaching/Learning Methodology</td><td>Lectures and individual written assignments.
<table>
<tr><td rowspan="2">Teaching/ learning methodology</td><td colspan="6">Intended subject learning outcomes</td></tr>
<tr><td>a</td><td>b</td><td>c</td><td></td><td></td><td></td></tr>
<tr><td>1. Lectures</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2. Seminars</td><td></td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>3. Lab sessions</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr>
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<tr><td>Assessment Methods in Alignment with Intended Learning Outcomes</td><td>
<table>
<tr><td rowspan="2">Specific assessment methods/tasks</td><td rowspan="2">% weighting</td><td colspan="6">Intended subject learning outcomes to be assessed</td></tr>
<tr><td>a</td><td>b</td><td>c</td><td></td><td></td><td></td></tr>
<tr><td>1. Assignment</td><td>50%</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>2. Lab report</td><td>20%</td><td></td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>3. Group project presentations</td><td>30%</td><td></td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>Total</td><td>100 %</td><td colspan="6"></td></tr>
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Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:
Assignments: These are designed to evaluate the students' comprehension of the core concepts and knowledge presented and discussed during the lectures.
Lab report: This component aims to give students practical experience with lab instruments and measurement devices, thereby preparing them for experimental activities and collaborative projects focused on injury prevention and healthcare.
Group project presentations: These presentations offer students a platform to showcase their research work. They are expected to conduct a critical review of relevant literature, conceptualize ideas, carry out experiments, and summarize their key findings.
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<tr><td>Student Study Effort Expected</td><td>
<table>
<tr><td>Class contact:</td><td></td></tr>
<tr><td>▪ Lectures</td><td>30 Hrs.</td></tr>
<tr><td>▪ Seminars</td><td>6 Hrs.</td></tr>
<tr><td>▪ Group project presentation</td><td>3 Hrs.</td></tr>
<tr><td>Other student study effort:</td><td></td></tr>
<tr><td>▪ Self-study</td><td>33 Hrs.</td></tr>
<tr><td>▪ Assignments and presentation preparation</td><td>45 Hrs.</td></tr>
<tr><td>Total student study effort</td><td>117 Hrs.</td></tr>
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<tr><td>Reading List and References</td><td>

1. Brukner, P., & Khan, K. (2017). Brukner & Khan's Clinical Sports Medicine (5th ed.). McGraw-Hill Education.
2. Bahr, R., & Engebretsen, L. (2009). Sports Injury Prevention: A Textbook on Prevention of Sports Injuries. Wiley-Blackwell.
3. Reider, B. (2015). The Orthopaedic Physical Examination (2nd ed.). Elsevier.
4. Kibler, W. B., & Safran, M. R. (2018). Sports Medicine: Core Knowledge in Orthopaedics. Elsevier.
5. Shultz, S. J., Houglum, P. A., & Perrin, D. H. (2015). Examination of Musculoskeletal Injuries (4th ed.). Human Kinetics.

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<tr><td>Date of Last Major Revision</td><td>20 August 2025</td></tr>
<tr><td>Date of Last Minor Revision</td><td>20 August 2025</td></tr>
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